Social Capital Formation in Global Value Chains: Evidence from Peru's Alternative Development Program

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Abstract

Social capital is a rich topic in the development literature. Despite this, there is an incomplete understanding of how social capital is formed when placed within the enabling or constraining structure of Global Value Chains. While governance of Global Value Chains is well understood as a powerful force that shapes the participation *of* farmers, the literature to date has not effectively explored the extent to which governance may shape participation *among* farmers.

The aim of this thesis is to explore how, if at all, governance shapes the formation of two types of farmers' social capital: structural and cognitive.

Within the context of Peru's Alternative Development Program, where there is a purposeful effort to develop the social capital of farmers, qualitative research was conducted on two case study Global Value Chains: cacao and palm oil. Interviews were conducted with stakeholders across the Global Value Chain, from farmers and collective organisations to exporters and importers.

The case studies revealed that governance can be an enabler of structural social capital formation, but its role is shaped by the institutional context and existing attitudes towards social structure. Governance can be an enabler or barrier to cognitive social capital formation, depending on the nature of the governing relationship between buyer and supplier.

To date, the literature on social capital formation has typically focused on factors internal to a collective group. The findings in the thesis shed light on the role of exogenous structures on the formation of social capital.

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1 Introduction

1.1 Research Background and Context

Defined as the "features of social organisation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam 1995, p. 67), social capital was originally popularized by Robert Putnam to explain economic disparities between Italian districts and the economic impact of falling bowling club membership in the United States (Putnam et al., 1993, Putnam, 1995). Despite its original orientation towards economic development and civic action in industrialized countries, the development literature has adopted the concept to provide the missing link in sustainable development (Grootaert, 1998).

Notwithstanding a rich account of the benefits in the literature, the governing role of buyers in shaping the social capital of farmers has been paid scant attention; even though the networks, norms and social trust that constitute social capital are embedded in the governance structures of Global Value Chains (GVCs) (Pietrobelli and Rabellotti, 2004). How these GVCs are governed could represent an enabling or constraining structure for social capital development. Using the context of the Alternative Development Program (ADP) in Peru, this thesis sheds light on this gap by exploring how, if at all, the social capital of farmers can be shaped by the governance of GVCs.

New 'rules of the game' are emerging in the global agri-food sector that mean the way we understand the linkages between rural production and global consumption have had to evolve (Poole and de Frece, 2010). These new rules of the game are embodied in the 'governance' of GVCs, becoming a growing topic of interest in both supply chain and development research (Gereffi and Lee, 2012). This notion of governance was first put forward by Gereffi (1994) in the literature as a way to explain patterns of geographical fragmentation across value adding activities in GVCs; from arms-length spot markets to the full integration of activities owned by a single firm. This framework continues to be particularly relevant to development studies because the scope for countries and regions to thrive depends in large part on their participation in GVCs that are typically coordinated by more powerful buyers. This coordination, conceptualized as governance, is the idea that "some firms in the chain set and/or enforce parameters under which others in the chain operate" (Humphrey and Schmitz 2004, p. 96).

There are calls in the literature to combine the vertical aspects of governance with the horizontal aspects facing farmers (Bolwig et al., 2010) and despite the explanatory power of the GVC framework, there has been no known attempt to combine the governance of GVCs with the process of social capital formation. This thesis addresses this gap within the context of international development.

1.2 Social Capital and International Development

International development is a complex subject area, not least of all because its meaning has a multitude of dimensions (Elands and Wiersum, 2001). In the past, the dominance of traditional approaches to development resulted in an explicit emphasis on modernization and production factors as the engines for economic growth (Clammer, 2005, Eade, 2002, Lunn, 2009). The focus extended beyond this emphasis when, in the face of a 'missing link' in development (Grootaert, 1998), social processes gathered a greater focus of research. The focus has broadened from the 'hardware' to the 'software' of development (Black, 2007); expanding beyond the role of infrastructure and technology to processes that are unseen but still contribute to development goals.

One aspect in this new paradigm is social capital. The development literature has had a greater focus on social capital than other disciplines, as Ellis (2000) notes: "Economists are only just beginning to come to grips with social capital, although it has already become mainstream in development studies discussion about the assets of the poor." (p. 296). The implementation of 'social funds' by the World Bank, which aims to develop social capital for the poor, is a reflection of how seriously the social capital concept is taken in development circles (Vajja and White, 2008). There is a broad consensus in the literature that social capital is a critical element for agricultural development and broader development for rural areas (Rainey et al., 2003, Fafchamps, 2006).

The application of social capital in development is especially distinct from its application elsewhere, as Molyneux (2002, p. 170) notes: "The social capital of bowling clubs and sewing groups in the United States is clearly not the social capital of the poor in Latin America". The concept itself is context specific (Cleaver, 2005, Bebbington, 2007), with Serra (2011) arguing that any attempt to standardize social capital between too-different contexts is simplistic. Gotschi et al. (2009) also supports this view, suggesting that the social capital in developed

countries is different to the social capital in developing countries and therefore theories concerning the concept cannot be exported like-for-like. On an intuitive level, the argument for distinguishing social capital in development from elsewhere holds strong. The way in which social capital manifests itself in a developing country context is incomparable to that of an industrialized country; the implications of the Indian caste-system (Mosse, 2006) or the Aztec influenced community working groups in the rural Andes (Maclean, 2010) would be unsuitable to analytically compare with, say, the European Union LEADER initiative for rural development (Ray, 1999). Distinguishing social capital within the development literature from elsewhere is pursued in the present research.

1.3 Agri-Food in an Agricultural Development Context

Agricultural development has long been considered a necessary component of rural development strategy. This is because many of the world's poor situate themselves in agricultural based activities (Markelova et al., 2009) and is an important tool for rural economic development (Fan and Rao, 2004). However agriculture alone only goes so far in the economic development of a country or region, particularly as economies grow from initial stages of development to industrialization (Byerlee et al., 2005). This demands going beyond the farm gate to a consideration of the agri-food chain as a whole for rural development research.

Agri-food chains are considered a crucial unit of analysis in the development literature because:

1) its main stakeholders consist of the rural poor; 2) it goes beyond farming as the only agricultural activity in rural areas; and 3) building on basic inputs improves the cost competitiveness of farming. There has been a growth of value added production through agribusiness, relative to primary production (Fair Trade Labelling Organization, 2007), and off-farm economic activity is of growing significance to the lives of the rural population; as the World Bank (2003) notes:

"Agro-enterprise activity employs the poor, either through self or wage employment. A rough estimate based on household income field surveys is that 25 percent of total rural incomes come from these non-farm (yet agribusiness) activities... agro-processing accounts for 20 to 35 percent of wage employment in the manufacturing sector" (p. 6).

Agri-food value chains account for one third of Gross Domestic Product (GDP) in developing middle income countries such as Chile, Brazil and Thailand, compared to a lower contribution of 20-25% in sub-Saharan Africa (Wilkinson and Rocha, 2009). This supports the view that the agrisector has a particularly strong developmental impact on countries that are transitioning into industrialized economies and are not subject to extremely poor living standards in the third world (figure 1), in part because a prosperous domestic market generates greater opportunities for agribusiness development (World Bank, 2003, Wilkinson and Rocha, 2009). All of the above, coupled with evidence that suggests off-farm income is crucial to rural households in developing countries (Lanjouw and Feder, 2001, Lanjouw and Lanjouw, 2001, Ellis, 2005), indicates that rural development is enhanced when intervention is extended from the farm to the agri-food chain, especially for middle income countries.

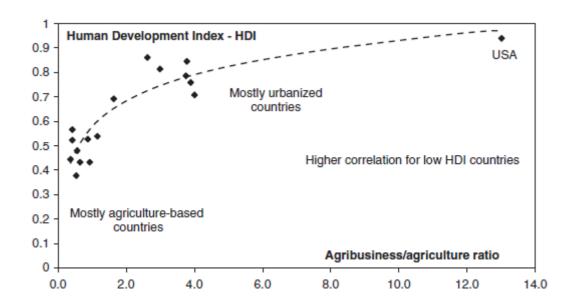


Figure 1: Relationship between human development and the agribusiness/agriculture ratio Source: Wilkinson and Rocha (2009)

Farm production capabilities have historically been the focus of research, especially considering the dominance of traditional theories of rural development over the past century (Cruickshank, 2009). Given the paradigm shift from the 'hardware' to the 'software' (Black, 2007), the trajectory of the literature has expanded the debate towards an emphasis on facilitating access to agri-food chains and enabling actors, particularly smallholder farmers, to compete effectively in increasingly competitive global export markets (Shepherd, 2007). The structure of agri-food chains are also changing dramatically; as Poole and de Frece (2010) note, vertical coordination

of economic exchange has become the choice organisational relationship in the agri-food industry as it moves away from reliance on spot exchange. The defining problem for researchers is to understand how farmers can participate in agri-food chains in a way where they can improve their livelihoods while at the same time understanding what intensifying governance in GVCs means to this end (Kaplinsky and Morris, 2002, Gereffi et al., 2001).

One context where such as effort is taking place is in Peru. The ADP aims to move farmers away from illicit coca production towards cacao exportation through the formation of social capital. Peru is categorised as a 'middle income country' (World Bank, 2011) and therefore is also a country where agri-food development is more likely to have its most significant impact compared to a subsistence agricultural context (Wilkinson and Rocha, 2009).

1.4 Peru's ADP and the Role of Social Capital

Coca, the base plant for cocaine, has a long history in South America. Even prior to the arrival of Spanish colonialism, coca was a religious symbolic commodity in the region that now comprises Bolivia, Columbia and Peru (Goncalves and Bastos, 1992). However since the 1980's, the religious symbolism of coca has transformed into an arena for organised crime involving drug cartels, law enforcement, terrorism and politics; with severe consequences for rural areas which continues to be the battlefield in the 'war on drugs' (Bastos et al., 2007). In part because the impact of coca production goes beyond the borders of producing into consuming countries, a range of international organisations are now involved in creating strategies to tackle the problem. The principal strategy of this is ADP.

Attempts to tackle the problem of coca production can be categorized into two strategies. The first is through long-standing forced eradication methods whereby the army and law enforcement destroy illicit coca crops in the hope that it deters farmers from growing coca in the future. Forced eradication has a mixed record, with some arguing that such methods in isolation have had limited success because crops have merely been displaced rather than eliminated (Bastos et al., 2007, Lupu, 2004). The economic benefits of coca production are certainly factors in this regard. It takes roughly twice the acreage of coffee compared to coca to provide equal returns, coca requires little maintenance and multiple crops can be grown throughout the year (Lupu, 2004, Léons and Sanabria, 1997). For a country where 80% of those classified as

'extremely poor' are engaged in agriculture (IFAD, 2011), the economic incentive to grow coca heavily outweighs the threat of forced eradication.

A different strategy, brought about through ADP, consists of socio-economic investments in alternative crops to coca; including cacao and palm fruit (Likins, 2012). Incentivising alternative crops through introducing the 'carrot' as well as the 'stick' has arguably had a more visible impact than forced eradication in isolation (Lupu, 2004). Some areas of Peru have experienced improvement in practically all economic, social and institutional indicators through strengthening collective organisations and facilitating access to international markets (UNODC, 2013). ADP involves a wide range of institutional organisations, from the national government of Peru to international development agencies.

In principle, social capital is an integral part of ADP because, as the literature has established, the ability of farmers to access lucrative export chains is facilitated by its existence (Asfaw et al., 2009, Kaganzi et al., 2009, Melo and Wolf, 2007). According to the United States Agency for International Development (USAID) (2010) and referring to the specific definition used by Putnam (1995), ADP has created social capital:

"Social capital has multiple definitions and uses. This evaluation used the term as defined by Robert Putnam: —Social capital refers to the features of social organisations such as networks, norms and social trust that facilitate coordination and cooperation for mutual trust... evidence of social capital generated by ADP includes the investments of community members in associations and cooperatives to improve training, acquisition of production inputs, and improved and value added post harvest and marketing activities of their products" (p. 19-20)

Both USAID and the United Nations Office on Drugs and Crime (UNODC) explicitly refer to the concept of social capital as a critical success factor of the ADP (USAID, 2010, UNODC, 2013). The integration of farmers into export chains is a fundamental part of ADP and therefore GVC stakeholders; buyers, Non-Governmental Organisations (NGOs) and other institutional organisations have the potential to shape social capital formation of farmers. Social capital thinking has been prominent in development policy and practice in Latin America, exemplified in a United Nations regional conference themed 'Social Capital and Poverty Reduction in Latin America and the Caribbean' (Molyneux, 2002). ADP presents a valuable context to explore the

gap in the development literature precisely because the program aims to build social capital within the framework of governed GVCs (USAID, 2010, UNODC, 2013).

1.5 Cacao and Palm Oil GVC Context

Cacao in Peru, although smaller relative to other exports, has experienced significant growth in recent years. In 2001, the cacao sector in Peru was valued at 8.5 million USD and in 2007, the sector had grown to 44.6 million USD (Peru Ministry of Foreign Trade and Tourism, 2007). Cacao is also a relatively high value product – the second highest exported agricultural product per tonne in the country (FAO, 2011). Cacao can be transformed into a variety of different end products, however food and drink are the most common (Kaplinsky, 2004a). Speciality export markets represent an important opportunity and Peru has already made inroads into these speciality markets; Zurich-based *Barry Callebaut*, the world's largest chocolate maker, uses Peruvian cacao in a high end chocolate product that targets elite consumers in Europe (Reuters, 2010). While cacao is growing into a key economic driver for Peruvian exports, it also holds a social and very unique purpose, summed up in a quote from the secretary of a cacao cooperative in Peru: "We used to be known for making cocaine paste, but now we are known for chocolate" (Chauvin, 2010). Cacao is one of three crops substitutable for coca in ADP and has been subject to significant stakeholder interventions to develop collective organisations (USAID, 2010, UNODC, 2013).

Alongside cacao, palm fruit is also a replacement crop for coca supported by the ADP. As with cacao, palm fruit was first established in Peru in the late 1990's and early 2000's by international donor agencies and the Government of Peru (USAID, 2010). Prior to this, palm fruit was grown first by African nations but then more recently Malaysia, which has since dominated global production (Poku, 2002). However given that tropical environments suit palm fruit production (Stickler et al., 2007), Peru has the potential to exploit the nine fold increase in global demand over the past 40 years (Ismail, 2011). Palm oil can be transformed into both food (e.g. frying fats, biscuits, snacks) and non-food (animal feed, cosmetics, industrial use) products, although typically the food retail and service sector dominate consumption of palm oil (DEFRA, 2011).

An exploratory look at the academic and grey literature reveals that there is likely to be a degree of governance by buyers over cacao and palm oil agri-food chains. In the cacao GVC: traders, millers and food manufacturers typically have a high degree of power in the chain (USAID, 2006)

and the distance in terms of stages in the chain between producers and consumers is large (Talbot, 2008, Kaplinsky, 2004a). The place of quality standards and certifications in the global cacao market also suggests that some coordination of and among smallholders is necessary (Wood and Lass, 1985). These 'standards', the requirements needed to win 'tickets' into lucrative value chains (Messner, 2004), have an important place in the development literature (Ponte and Ewert, 2009, Ponte and Gibbon, 2005, Fischer and Qaim, 2012). In the palm oil GVC, refineries set the standards for the export market and are typically located in the consumer market (DEFRA, 2011). As with cacao, there is a distinct separation between upstream and downstream stakeholders (Wakker et al., 2005, Geibler, 2012). Even upstream between farmers and millers, governance plays an important role because of the issue of quality degradation between the time when palm fruit is picked and when it is milled (Hai, 2002). Cacao and palm oil therefore lend themselves to a research topic concerning the concept of governance.

1.6 Overview of the Thesis

This chapter has introduced the context for the thesis in terms of: where social capital is placed in the development literature; the place of agri-food chains within the development debate; ADP in Peru; and the suitability of ADP in Peru as a valuable context to examine interventions in cacao and palm oil agri-food chains.

Chapter 2 reviews the literature that is associated with the research topic. It begins with an historical summary of the development literature which has evolved from a technocratic view of development that focused primarily on physical factors such as technology and infrastructure as driving forces, expanding towards 'soft' concepts that are less tangible yet equally as important, such as culture and human capital. Within this latter debate sits the concepts of social capital and governance where the gap in the literature lies.

Chapter 3 presents a conceptual framework where the main factors influencing social capital have been identified from the literature and the concepts developed by Gereffi *et al.* (2005) is adapted to explore how governance shapes social capital formation. A brief explanation of the concepts are included that refers back to the literature and detailed propositions are laid out that flow from the research question.

Chapter 4 describes and justifies the methodology to be used to collect and analyse the data. Any discussion of research methods typically begins with a philosophical underpinning which is presented in this section. A qualitative case study approach is proposed followed by a discussion of methodological issues and how the methodology addresses these in its design.

Chapters 5 and 6 presents the findings of the two case studies – the PeruCacao GVC, from cacao collective organisations in Peru to the cacao importer based in Switzerland; and the PalmPeru GVC, where the principal governing relationship is between a producer association and a palm fruit miller.

Chapter 7 discusses the findings from the two case studies in relation to the existing body of knowledge, identifying the similarities and differences through a cross-case comparison. The chapter ends with presenting the contribution to knowledge that gives a novel perspective on social capital formation compared to existing viewpoints in the literature. The final chapter (8) draws out the key conclusions – for academics, practitioners and policy-makers, identifying the limitations of the thesis and potential areas for future research.

The next chapter moves onto a review of the literature and the identification of gaps in the existing body of knowledge, setting the foundations for the research question that this thesis addresses.

2 Literature Review

2.1 Introduction

This chapter reviews the development literature and where appropriate, relates it back to the context of agriculture. It begins by defining development followed by discussing different approaches. Traditional theories, composed of neo-classical theory and modernization theory, put a strong emphasis on bringing agricultural productivity up and pushing food prices down. While these approaches put productivity at the forefront of agricultural development, they have limitations in that historically, prices fell for urban consumers but only benefitted farmers when costs fell further, bringing us back to a core problem facing traditional theories; 'urban bias'.

The antithesis to the traditional frameworks of rural development is dependency theory. This approach argues that ceasing trade linkages between development and developing regions, rather than building on them, is the only way development can be achieved. However, this approach met an 'impasse' (Booth, 1985) because it failed to explain the success of countries that managed to build on world trade links, as well as offering few constructive policy choices.

The last approach discussed is the endogenous approach. Those who advocate this position argue that rural development is best developed from the bottom-up, rather than the top-down initiatives of modernization theory. Within the bottom-up theory is the territorial/neo-endogenous approach which makes the case that the linkages within rural spaces *and* with extra-local forces enables rural actors to positively change their economic position. A distinct trajectory in the literature is demonstrated, from farm based production capabilities towards newly uncovered, unseen forms of capital.

Social capital, as one of these unseen forms of capital, is then reviewed – distinguished between macro (national), meso (organisational) and micro (individual/household) applications. The key weakness of social capital is presented - its definition and lacking conceptual clarity (Durlag, 2002). This is a fundamental issue to address for the research topic, as a study on how social capital is shaped requires a clear understanding of what it is. While it is clear this is a weakness, Uphoff and Wijayaratna (2000), in their distinction between structural and cognitive social capital at the meso-level, have provided greater conceptual clarity which the present study adopts. A theme running through the social capital literature is that while there has been

progress in understanding the benefits and detriments of social capital, a conceptual framework for understanding how it is formed is incomplete.

An important notion that links with how farmers participate in GVCs is governance. Governance is a growing topic of relevance in development research (Gereffi and Lee, 2012), principally because the opportunities for countries and especially rural areas to move beyond poverty is dependent on farmers' participation in GVCs coordinated by more powerful buyers (Gibbon and Ponte, 2005, Gereffi and Lee, 2012, Reardon and Farina, 2002, Lee et al., 2011). The definition of governance in the GVC literature is different from how the term is used elsewhere and this distinction is described in the review. Governance as a concept is complex and multi-faceted (M4P, 2008) and therefore the literature review on governance breaks down the concept into key dimensions linking back to the literature: standards, upgrading, relationships and trust.

While the concept of governance provides explanatory power for how buyers actively shape the participation of farmers in GVCs, it has typically failed to be linked with dynamics on the ground, leading to a number of scholars to argue that the future of governance research lies in its integration with analysis at the rural level (Challies, 2008, Fold and Gough, 2008, Bolwig et al., 2010, Neilson, 2008, Messner, 2004). There are therefore two distinct notions emerging from the literature review: 1) a framework for social capital formation is incomplete; and 2) there is scope for bringing the concept of governance to social phenomena at the rural level. The chapter ends by using these two notions, derived from the literature review, to justify exploring how the governance of a GVC shapes social capital among farmers.

2.2 Defining Development

Development has three dimensions to its definition: it is a process, in that it is a series of steps which leads or hopes to lead to a particular outcome; a strategy, because development is incorporated into plans and policies; and a phenomenon, in that it can be observed as an outcome from the first two dimensions just described (Elands and Wiersum, 2001, Singhe, 2009). Similarly, Gasper (2004) identifies four main usages of 'development' in the literature:

- 1. Development as a structural change, such as income;
- 2. Development as an intervention;
- 3. Development as an improvement towards a positive outcome; and
- 4. Development as the foundations for future outcomes.

The last usage suggests that development can be considered as the facilitation of an outcome at a later date. It is important to understand this multitude of usages because they do not always take place at the same moment and can even be contradictory, for instance Potter and others (2008) note that income may rise at the expense of equality, therefore pitting definitions 1) and 3) against each other. Given that social capital is a building block for development, it can be associated mostly with 3) and 4) since it is both an improvement towards a positive outcome as well as a foundation for future income generation.

There is no comprehensive definition of rural development in the literature (van der Ploeg et al., 2000, Clark, 1997). While defining rural development on a conceptual level is yet to be agreed on, we can begin with a basic definition of development as something which means progress and advancement beyond the current state (Singhe, 2009, Potter et al., 2008). It is the difference between where things are and how they should be. It then leads on that rural development is this definition applied to the definition of rural; the countryside rather than the town (Oxford Dictionaries, 2011). However what constitutes the 'countryside' itself is also disputed.

Since Pahl's (1966) initial critique of the 'rural-urban continuum', there has been little consensus of what constitutes a rural space (Elands and Wiersum, 2001) and it remains a contentious issue in the literature (Trauger, 2009). There are large disparities among countries in the definition of 'rural' in census and survey data (Lanjouw and Lanjouw, 2001). Bhagat (2005) lists examples of how diverse the range of definitions are. In South Asia, Nepal defines rurality based on population size but Bangladesh and Sri Lanka define urban and rural areas based on administrative assets such as the existence (or absence) of local councils and committees. In the United States, the 'urbanised area' concept is used, which defines a urban area as a central city and surrounding suburbs with a minimum 50,000 population and a population density of 400 people per km₂. In China, definitions are political with no clear criteria (Zhu, 2001). In the UK and Brazil, the concept of a 'built up area' is used to define urban areas (United Nations, 2001). Lanjouw and Lanjouw (2001) state that rurality is most commonly defined to include

communities of 5,000 people or less, yet just from the various national definitions provided above, an attempt to generate a generalizable classification is a difficult task and largely context-specific.

Rather than being entrenched in the various ways to define rurality, the present research takes a simple definition of what rural and rural development is. Rurality can be considered as an area that contains particular aspects that are associated with rural life, including farming, extension services, small crafts, pastoral tourism and rural infrastructure (e.g. irrigation) (Singhe, 2009). From this logic it follows that rural development seeks to develop these aspects of rural life for the benefit of the people who live there. Given that farming is an activity largely confined to the rural environment (Singhe, 2009), agriculture is a dimension of rural development and the present research is placed within this context.

Prior to the 1960's, economic indicators were the primary measurement for development outcomes (Elliot, 2002). This very much reflected the theoretical path of the time where development and economic growth was considered two sides of the same coin. Influenced by sociologists like Mark Weber, modernization theories and the 'rationalization of sociology' put positivist ideas at the forefront of development sociology. The link between 'modernity' and economics, coupled with the emergence of growth theories, led to a strong emphasis in the literature on using objective economic measurements to understand processes of development (Willis, 2005).

The Basic Needs Approach (BNA) developed in the 1970's incorporated context and local-orientated objectives, allowing for a diversity of development outcomes (Elliot, 2002). BNA is based on a belief that poverty can be defined by a range of resource requirements, such as food, clothing, drinking water, health and education (Ingham, 1993). During the same period, institutional organisations such as the United Nations and World Bank began to use social in addition to economic indicators to measure development. In addition, Freire (1970) pushed for Participatory Action Research approach, advocating that 'subjects' of development should have an environment where they can express their needs and therefore identify and judge development outcomes. This participatory approach to measuring development was largely seen as a reaction to the failings of Eurocentric, positivist and top-down development initiatives (Mohan, 2002). The emphasis on participatory rather than economic measurements of rural development mirrors the acceptance of qualitative tools in development studies. Using several

quotes, McIlwaine (2002) (p.82) demonstrates how poverty is experienced in different ways to different people and as a result, the value of a qualitative approach to development research:

"For me, being poor is having to wear trousers that are too big for me."

"It's poverty that makes me drink until I fall over"

The first person, a young boy, defines poverty in terms of the second hand clothes that are passed onto him. The second person, a 35 year old man, defines poverty in the context of the social problems that are associated with it; namely alcohol abuse. Clearly the meaning of poverty is different in these two quotes and demonstrates its subjective nature.

Amartya Sen (1983), an influential development economist, put forward the Human Development Index (HDI) and other capability orientated development measurements in the literature. This created a bridge between welfare and development economics and drew an important distinction between economic growth and development. Other capabilities theorists have further developed the capabilities approach, most notably Seers *et al.* (1979) and Nussbaum (2000) that include capabilities such as employment, participation and education.

While there are certain deficiencies when using monetary indicators to measure rural development, this does not mean that economic growth is not an important element of such a process. The way that economic growth is translated into development differs between countries and regions and as a result, economic growth should be considered an 'engine' for development rather than an end to itself (UNDP, 1997). Rather than replacing economic indicators, approaches such as BNA and HDI enriched understandings of development outcomes.

As eluded to, the different ways that development is defined very much depends on the starting point for theory. What is also evident in the literature is that theory and policy are intertwined, for instance a discussion of modernization theory inevitably leads to examples of a policy paradigm based on state intervention. The following section details the main theories of development in the literature within the context of agricultural and rural development.

2.3 The Emerging Role of the 'Social' in Development

2.3.1 Neo-Classical Theory, Modernization and the 'Hardware' of Development

Adam Smith's (1776) principle of absolute advantage and Ricardo's (1817) principle of comparative advantage in trade argues that some countries or regions will have a relative advantage over others in producing certain goods and services. This creates a theoretical underpinning for rural specialization in agriculture and other goods that can be produced more efficiently in rural regions. An important element of the neo-classical approach is the role of production constraints on the profitability of rural firms and as a consequence, rural inputs and outputs. When production costs increase for rural labour and capital investment, the supply of outputs in the form of the food supply and rural goods and services fall (Herzfeld and Jongeneel, 2011). Any factor seen to negatively impact on production costs reduces profitability and demand for inputs/supply of outputs, both upstream and downstream. This led to the view by neo-classical economics of institutions and regulation as 'methodological irritations' (Raina, 2003) where deregulation, privatization and reducing government interference is the advocated position (Arce, 2003).

One of the arguments made in the neo-classical discourse is that when governments are involved in rural development, such as the intense processes of agricultural modernization that have taken place throughout Asia, the propensity for corruption increases; a notion that Mackinnon describes as the equivalence of ethical government and limited government (2002). However there is sizeable evidence which shows that government intervention generates rural economic growth and reduces rural poverty, in particular: agricultural research and extension services (Fan and Zhang, 2008, Fan et al., 2008, Hazell and Braun, 2006, Salehezadeh and Henneberry, 2002); rural infrastructure (Minten and Kyle, 1999, Fan et al., 2000, Corral and Reardon, 2001, Lanjouw, 2001, Abdulai and CroleRees, 2001, Renkow et al., 2004, Deininger et al., 2007, World Bank, 2009, Kirubi et al., 2009, Winters et al., 2009, Gibson and Olivia, 2010, Dillon et al., 2011, Cunguara and Darnhofer, 2011, Datta, 2011); and dealing with external shocks to rural systems (Aggarwal, 2006).

Simpson (1974) finds that productivity growth in rural labour is unlikely to lead to development of rural areas without a form of cooperative organisation. The conceptual basis of cooperative organisations; local networks and linkages, have been shown to be an important factor for

successful rural economic growth (Terluin, 2003, Jenkins and Parrot, 1998, Kristiansen, 2002, Kostov and Lingard, 2003, Galloway et al., 2011, Galdeano-Gómez et al., 2011, Bagnasco, 1988) as well as for specifically increasing rural incomes (Bair and Gereffi, 2001, Carrillo, 1998, Czaban and Henderson, 2003). This leads to the charge against neo-classical theory for 'undersocializing' linkages because it only conceptualizes linkages as trade rather than representing resources themselves (Granovetter, 1985, Granovetter, 1973).

Modernization theory begins with the conceptual notion of society as an organism which evolves through stages of development and is made up of organic parts or 'functions'. These ideas of society and social evolution were introduced by Spencer (1974), Durkheim (1965) and Weber (1967) in the 19th Century. Durkheim argued that societies went through a process of development change, from primitive states to Western styled societies; and this process is what we describe as 'modernization'. As Ingham (1993) notes, modernization theorists felt after World Water Two that development could replicate the experience of existing industrialized countries by following the patterns of Western Europe, the United States and Japan. Rostow (1960), a notable modernization theorist, argued that societies and economies go through five stages of economic growth: 1) traditional society; 2) preconditions for take-off; 3) take-off; 4) drive to maturity; and 5) mass consumption. What brought together modernization theories was the role of structuralism; the idea that particular processes could be predicted based on their relationship to wider processes.

As with neo-classical theory, modernization advocates an almost exclusive focus on reducing production costs and prices (Marsden et al., 2001). The notion that agriculture has the purpose of serving the industrialized urban population, is destined to decline in employment share and economic growth is equivalent to rural development are all central to both modernization theory and neo-classical economic positions on rural development. However the difference between the two approaches is that while neo-classical thinking promotes non-interventionism through the removal of production constraints, modernization theory explicitly argues for intervention in agriculture to bring it to a level of productivity that can meet the demands of urban population growth (Lernoud, 1999, De Janvry and Sadoulet, 2000).

Infrastructure investment became and continues to be a driving topic for modernization within the rural development literature. Infrastructure are services which are typically supported by the public sector for the general population, although it can be provided by the private sector also, and includes rural services such as water, sewerage, solid waste management, transportation and roads, electricity and telecommunications (Fox and Porca, 2001). The remote nature of rural areas with low population density means that infrastructure in rural areas is an essential element of the rural development mix (Davidova et al., 2008).

The evidence behind the positive effect of infrastructure for rural areas is overwhelming (Minten and Kyle, 1999, Fan et al., 2000, Corral and Reardon, 2001, Lanjouw, 2001, Abdulai and CroleRees, 2001, Renkow et al., 2004, Deininger et al., 2007, World Bank, 2009, Kirubi et al., 2009, Winters et al., 2009, Gibson and Olivia, 2010, Dillon et al., 2011, Cunguara and Darnhofer, 2011, Datta, 2011), from water irrigation (Corral and Reardon, 2001, Dillon et al., 2011, World Bank, 2009) to rural road access (Corral and Reardon, 2001, Dillon et al., 2011, Datta, 2011) and communication technology (Overa, 2006). Only one empirical study could be found which disputed the effectiveness of rural infrastructure and this was largely because of problems associated with government failure (Davis et al., 2001). Throughout the 1960's, the expansion of irrigation in particular grew rapidly in the developing world through the construction of large dams and river barrages (Heathcote, 1983).

Coupled with the importance of physical infrastructure is the impact of monetary infrastructure (or 'financial capital'), in particular rural finance. A multitude of studies show that rural finance has a significant impact on the ability of rural actors to change their economic position (Manig, 1990, Binswanger et al., 1993, Sharma and Zeller, 1997, Tsai, 2004, Kuyvenhoven, 2004, Mukherjee and Zhang, 2007, Segers et al., 2010, Giné, 2011, Ahlin et al., 2011). Just taking one of these studies, Binswanger *et al.* (1993) found that rural banks in India positively impacts upon agricultural output which in turn spurs infrastructure spending that brings more rural banks to an area, thereby creating a strong multiplier effect for rural development. It is now well understood that rural finance represents the 'blood' of development.

Alongside infrastructure and finance was the Green Revolution. The Green Revolution was a technological transformation that changed agriculture around the developing world, in particular India, Latin America and Asia, where food production was enhanced through combining high yield staple food seeds with mechanized agricultural technologies (Butler, 2007, Dethier and Effenberger, 2011). The benefits from the Green Revolution are both promoted and disputed in the literature. De Janvry and Sadoulet (2002) claim that it doubled and in some cases tripled yields in the developing world, acting as a powerful poverty reducing tool with income

generation in Africa, indirect agricultural employment generation in Asia and linkage effects in Latin America. In another paper, De Janvry and Sadoulet (2000) make the case that in Latin America, technology in agriculture has both direct effects on farmers and indirect effects for the wider area from lower food prices, employment and wage effects through production, consumption and savings linkages with non-agricultural sectors. Minten and Barrett (2008) and Cunguara and Darnhofer (2011) present similar findings for rural Madagascar and Mozambique respectively. Lipton and Longhurst (1989) push not just economic but also the significant social benefits which resulted from the Green Revolution.

Other studies are not so supportive of the claimed gains accrued from the Green Revolution. Analysing the effects of the Green Revolution from 1960-2000, Evenson and Gollin (2003) find that although consumers gained from low food prices, farmers only benefitted where cost reductions outweighed price reductions In some developing countries, the Green Revolution was followed by a downward trend in real rural wages (Boyce and Ravallion, 1991), suggesting that not all rural actors benefitted as a result. What seemed to emerge from the modernization debate was that although improving productivity was an important strategy, more was required to bring these gains back to rural areas.

While aspects of the modernization hypothesis hold strong, most notably in its consideration of government as a positive participant in development, the prognosis that developing countries and regions could follow the same steps as industrialized nations fell short. Modernization theorists regarded development to follow a 'universal pattern' (Bernstein, 1971), but as Ingham (1993) notes, the circumstances facing Western democracies in the 19th century were profoundly different to developing regions today.

In addition, some scholars argue that modernization focuses on intense commoditisation at the expense of local knowledge, equitable gains, cultural capital and specific problems facing smallholders (van der Ploeg, 1992, van der Ploeg et al., 2000, Murdoch, 2003, Lernoud, 1999, Zezza et al., 2008, Larsen, 2008, Barrett, 2008). A reaction to the perceived unfairness of both neo-classical and modernization theories of development led to the notion of dependency theory – the idea that not only were traditional theories of development ineffective, but harmful for rural areas.

2.3.2 Dependency Theory as a Critique of Traditional Approaches to Development

Modernization theory and economic growth models characterize the beginning of the development literature. But their perceived failure to explain why some regions of the world did not and have not gone through meaningful development, despite greater integration into the world economy, led to a pushback in the 1950-1960's and the formation of an alternative theoretical framework. Dependency theory positioned itself largely as an antithesis to neoclassical and modernization theories, as Gore (2000) describes:

"Dependency theory, instead of indicating how national development was affected by the articulation between internal and external factors, simply put forward an antithesis to the mainstream approach, arguing that external factors were the only ones that mattered, and then deduced by delinking from the world economy, an 'authentic' development process, solely founded on internal factors, could be made to occur" (p. 792)

The core proposition from dependency theorists is that developing countries are economically marginalized because advanced, consumption-based economies seek to take advantage of low cost natural resources and labour surpluses (Preble, 2010, Kay, 2006, Galdeano-Gómez et al., 2011). Dependency theorists attacked existing theories, claiming that 'development' from the Western world had actually resulted in 'underdevelopment' because the relationship between rich and poor countries was the cause of the latter remaining poor.

Singer (1950) and Prebisch (1962), the fathers of dependency theory, argued that historically, developing countries were obtaining a falling share of gains from trade with developed countries. Frank (1967) and Caputo and Pizzaro (1974) advanced the notion that the divide between rich and poor countries was not the lack of trade but the trade itself. In the context of dependency theory, Frank (1967) coins the word 'underdevelopment' with regard to the state of dependency between poor and rich countries, rather than the stage prior to becoming developed.

In the 1980's, dependency theory reached an 'impasse'. David Booth (1985) criticised dependency theory for being out of touch and having limited value in policy formation. Warren (1980) pointed out that dependency theory failed to explain why capitalist development had led to improving standards of living and economic growth in some developing regions. Booth's

critique heavily influenced the development literature to the extent that since then, the literature has been concerned more with understanding why the theory failed rather than expanding and building on it (Manzo, 1991, Schuurman, 1993, Ray, 1995, Munck, 1999, Perraton, 2007). The success of Newly Industrialized Countries (NIC) in the 1980's, particularly in East Asia and Latin America, challenged the destitute image placed on developing countries by dependency theory advocates (Bienefeld, 1988, Gore, 2000). Bienefeld (1988) describes these historical developments as 'global evidence' that went against dependency theory advocates.

Despite the impasse facing dependency theorists, the challenge that traditional theories of development were not benefitting the rural poor, especially within the context of 'urban bias' (Potter et al., 2008), remains valid. A new approach emerged that, rather than seeing urban areas as the drivers behind rural development, regarded local 'assets' as sources that rural development could draw upon. The emergence of endogenous development as a concept coincided with a greater focus on the 'social' aspects of economic transactions, setting the basis for the establishment of social capital as a concept in development thinking.

2.3.3 Endogenous Development and the 'Software' of Development

As expected, the evolution of the theoretical literature has influenced the direction of empirical research. Neo-classical and modernization theories put an almost exclusive emphasis on agricultural productivity as the driving force, with factors of production being the principal topics of research. Dependency theory highlighted the limitations of a purely exogenous view of development. With the expansion of theoretical perspectives, the literature has seen a widening focus towards intangible factors that take into account endogenous factors as drivers of development.

Endogenous development is the notion that rural development is primarily driven by local rather than extra-local forces (Elands and Wiersum, 2001). Where traditional theories of development regard agriculture as a separate unit of analysis from the rural spaces they are situated in, and aim towards achieving scale economies; the endogenous, bottom-up approach to rural developments puts agri-chain activities back into the societies they are based (Murdoch et al., 2000). There is a strong theoretical relationship between bottom-up approaches and the concept of endogenous development. Bottom-up approaches see rural spaces as the starting point for rural development, as opposed to over-arching organisation that begins from the top

and seeks to 'trickle down' the benefits of development (Oskam et al., 2004). Similarly, endogenous development sees development as coming from within rural spaces rather than coming from external sources as advocated by exogenous development models that are observed in neo-classical and modernization theories. Table 1 shows the main differences between exogenous and endogenous development.

Table 1: Differences between exogenous and endogenous approaches to rural development

	Exogenous	Endogenous development
	development	Endogenous development
Key principles	Economies of scale	Local resources as the
	and specialization	source of development
Dynamic force	Needs of urban areas	Local rural actors
Functions of rural areas	Primary commodities	Capacity of local actors
Major rural development	Productivity	Building rural environment
problems		to build capacity
Criticism	Urban-rural bias	Complex unseen processes

Adapted from Galdeano-Gómez et al. (2011)

Unlike the top-down paradigm of exogenous development which has overarching principles and objectives, the bottom-up paradigm associated with endogenous development incorporates multiple strategies. This is largely because of the emphasis the bottom-up approach attaches to complex phenomena on the ground which requires more than one approach to reveal the underlying processes (Stöhr, 1981). There is a strong link between the idea of local competitiveness and bottom up development where local grass-root organisations, growing in prominence as a legitimised form of 'institution' (Uphoff, 1993), play a role in the coordination of local enterprises (Terluin, 2003). Sonnino (2004) argues that this approach leads to development outcomes which would otherwise be missed in a top-down paradigm, because it takes into account the high degree of diversity between rural areas - the 'local narrative', as Poole et al. (2013) describes it. There is a perceived failure of government initiatives to bring development from the top (Bitzer, 2012). This is evident in the distinction made between allpurpose development factors, such as infrastructure and public sector services, which can be easily coordinated from the top because of their homogenous nature, compared to more specific and diverse needs of rural actors that require less centralized approaches (Zezza et al., 2008).

Friedmann and Weaver (1979) put forward the argument that development theory was too concerned with functions at the expense of territorial spaces. This argument generated a new approach to development that considered rurality as a space in itself, rather than as a function of urban areas which was a view claimed to have contributed to 'urban bias' (Potter et al., 2008). Instead of focusing on single rural sectors, the territorial approach (a derivative of endogenous theory) takes the position that rural development is best achieved when a multitude of rural stakeholders are incorporated and focused upon. This approach is characterized by diversifying and enriching rather than disconnecting rural-urban linkages, innovating rural processes and decentralization of power to the local level with a greater emphasis on the local context (Schejtman and Berdegue, 2004). A difference between the territorial approach with the wider endogenous approach to development is the inclusion of extra-local linkages, leading some to describe it as 'neo-endogenous' (Ray, 2002). Here there is an acceptance of both internal and external linkages as important to rural development where the rural versus urban and agriculture versus non-agriculture conflict is replaced with an approach that attempts to maximise synergies between these dichotomies.

The European Union's approach to rural development is sometimes described as territorial in nature (Ray, 1999, Zezza et al., 2008, Goodman, 2004, Furmankiewicz et al., 2010, Marquardt et al., 2011, Lee et al., 2005, Dargan and Shucksmith, 2008, Kovách, 2000, Shucksmith, 2000, Jones and Clark, 2003, Chanteau, 2002, Ward et al., 2003, Bosworth and Willett, 2011, Marsden and Sonnino, 2008). Indeed it has been argued that European Union rural development initiatives have alone re-vitalized interest in territorial rural development since its original theoretical conception by Friedmann and Weaver (1979) (Ray, 1999). The growing importance attached to non-farm income for rural households provides strong empirical support for the argument that a non-sectoral approach is the most effective method to improve rural incomes (Evans and Ngau, 1991, Reardon et al., 1998, Reardon et al., 2000, Ferguson, 1998, Deininger and Olinto, 2001, da Silva and Grossi, 2001, Ferreira and Lanjouw, 2001, Lanjouw and Feder, 2001, Berdegué et al., 2001, Ruben and Van den berg, 2001, Start, 2001, Reardon et al., 2001a, Lanjouw and Lanjouw, 2001, Ellis, 2005).

A prominent idea that has developed as part of the divergence from traditional theories is Sustainable Development (SD). The concept of sustainability arose originally within the context of renewable resources to mean "the existence of the ecological conditions necessary to support human life at a specified level of well-being through future generations" (Lele, 1991, p. 609). The

publication of 'Our Common Future', by the World Commission on Environment and Development (World Commission on Environment and Development, 1987), is regarded as the catalyst for the discourse around SD. The definition of SD used in 'Our Common Future' is the same definition that is used today: "Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs." (Sustainable Development Commission, 2015).

Since its introduction to the development lexicon, SD is now a core tenant of current policy thinking. The United Nations has 17 Sustainable Development Goals, from gender equality to governance (United Nations, 2015). Although SD was initially orientated towards environmental concerns, it has incorporated both economic and social sustainability (figure 2). Balancing these three dimensions is a topic that gets to the heart of SD (World Commission on Environment and Development, 1987); for instance, driving industrial growth to achieve economic sustainability can, in many instances, be to the detriment of ecosystem integrity.

One component of SD is human capital (Veron, 2001). Schultz (1961) is seen as one of the founders of the human capital concept and while there are a number of different definitions, it can essentially be summed up as the learning capabilities of individuals that has value in the production of goods and services (Lucas, 1988). The basic proposition of advocates is that human capital matters because it is a significant contributor to economic growth (Nafukho et al., 2004) and has a particularly strong impact within a developing country context (Psacharopoulos, 1994). However there are two derivative theories that attempt to explain how and why this takes place. The neo-classical argument claims that human capital increases productivity and therefore boosts an economy's output, whereas the endogenous understanding regards human capital as a driver of innovation and technology which in turn promotes growth (Hanushek and Woessmann, 2008).

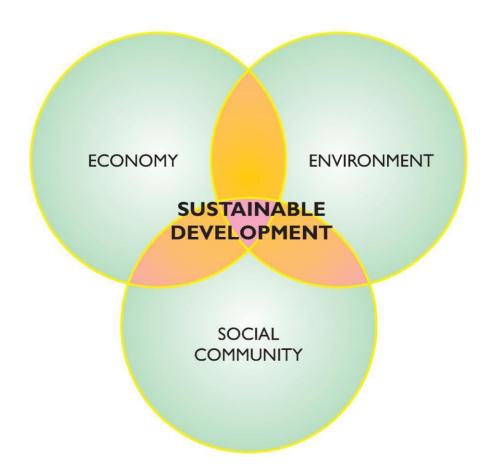


Figure 2: The Three Dimensions of Sustainable Development

Source: Sustainable Development Commission (2015)

Measuring human capital is an issue under dispute. Although educational enrolment and attainment have been the dominant proxies used to measure the concept, it is notoriously difficult to measure human capital because it incorporates a complex set of human attributes and is a multifaceted concept (Barrow and Lee, 2001). Indeed Benos and Zotou's (2014) review of previous studies shows that even when controlling for publication selection bias, the large variances between degrees of influence of human capital on economic growth among studies can largely be put down to differences in measurements and models. This is also backed up in Benhabib and Spiegel's (1994) findings that when using one econometric model, human capital has a positive relationship with per capita growth rates but when using another, the relationship is insignificant.

Despite questions over how human capital should be measured, there is evidence that human capital make a valuable contribution in developing countries. Baldacci et al.'s (2008) study in 118 less developed countries shows a positive relationship between educational enrolment and economic growth. Likewise Levine and Renelt (1992) find a positive relationship between

primary and secondary enrolment and economic growth in 103 countries. Noorbakhsh et al. (2001) study finds human capital is not just a determinant, but one of the most important determinants of Foreign Direct Investment (FDI) flows for developing countries – a key driver of economic growth. There is also evidence that shows reduced child mortality rates can also be achieved through human capital development (Barrow and Lee, 2001). Moving to agri-chain development specifically, Fikru (2014) finds that a factor in achieving certification is a manager's human capital and other studies show the positive impact of human capital on agricultural productivity in developing countries (Azhar, 1991, Phillips and Marble, 1986, Chou and Lau, 1987).

In some studies, the role of human capital on economic growth is less clear. From a study in 52 African countries, Appiah and McMahon (2002) conclude that there is an insignificant relationship between primary/secondary school enrolment and economic growth. Furthermore, others make the case that expansion of school attainment does not assure the improvement of economic conditions (Pritchett, 2006, Hanushek, 2013). Hanushek (2013) argues that rather than attainment as an indicator, more should be done to measure human capital through school quality in developing countries, suggesting that cognitive skills are a better indicator. Psacharopoulos (1994) reviews the literature and concludes that while primary education is an important investment priority in developing countries, rates of return decline as the level of schooling and per capita income increases. Despite questions over the strength of the relationship and the methodologies used, the general conclusion from the literature is that human capital is an important part of the development mix, including agricultural development (Singhe, 2009).

Alongside human capital came the notion of cultural capital. Early modern theorists made the assumption that cultural traditions constrain development activity (Hoselitz, 1952, Hagen, 1980). These authors took the view that development was a progressive force and traditional cultures were largely regressive, essentially creating a dichotomy between the two. However, more recently cultural caputal has been brought back as a part of bottom-up, endogenous rural development (Luloff, 2009). From the literature, culture can be seen as both a barrier (Ransom, 2011, Platteau, 2009, Bowen and Master, 2011) and a resource (Ray, 1998, Murdoch et al., 2000) for agri-chain development. Where culture appears to have had its most significant positive impact for rural development is through the enhancement of rural tourism (MacDonald and Jolliffe, 2003, Hemphill et al., 2004, Jenkins and Oliver, 2001, Arnaboldi and Spiller, 2011).

The above discussion outlines a distinct trajectory in the literature, going beyond the 'hardware' (concrete objects) to the 'software' (social processes) of agricultural development. This trajectory reflects a changing attitude towards what 'capital' means. Before the 1960's, only four main factors of production were considered; however this soon evolved to a multitude of different 'capitals', such as cultural and human capital, that could not be directly observed but were as important to understanding economic growth as the traditional grouping (Edvinsson and Malone, 1997). One such form of these contemporary understandings of capital is social capital, described as the 'missing link' in development studies (Grootaert, 1998) and one of the pillars of SD (Veron, 2001). The next section begins the discussion on social capital by reviewing the literature on collective organisation.

2.4 Social Capital

2.4.1 A Weak Concept?

Before reviewing the empirical discussions around social capital in the development literature, it is important to discuss the discourse from a definitional point of view. Robert Putnam (1995), attributed with its popularity as a concept, defines social capital as the features of social organisation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit. Since this definition is broad and open to interpretation, researchers have used the concept to describe a variety of phenomena and not all of them relatable to one another (Pender et al., 2012). Many of the criticisms of social capital are not over its benefits, but rather the 'fuzziness' of the concept, as Durlag (2002) notes: "the empirical social capital literature seems to be particularly plagued by vague definition of concepts, poorly measured data, absence of appropriate exchangeability conditions, and lack of information necessary to make identification claims plausible" (p.474). Fine (2010) makes the case that social capital is a term used fashionably in research circles that, when scrutinised, lacks analytical power because of the way the concept has been trivialised across disciplines; even going as far to say that it could be having a negative impact our understanding of development and globalization.

Indeed, definitions of social capital are broad in scope. For instance, Sporleder and Moss (2002) define social capital as the "the capacity to collaborate" (p. 1347). Woolcock (1998) defines it as

"information, trust, and norms of reciprocity inhering in one's social networks" (p. 153). The agricultural economics literature regards social capital as a "socio-emotional good" and a constituent of an economic transaction (Robison and Flora, 2003). Robison et al. (2002) defines social capital as: "a person's or group's sympathy toward another person or group that may produce a potential benefit, advantage, and preferential treatment for another person or group of persons beyond that expected in an exchange relationship" (p. 19). Van Staveren and Knorringa (2007), acknowledging that the literature is awash with definitions, boils them all down to the idea that 'relations matter' and while there are a diversity of meanings, many definitions (as well as measurements) can be related back to the notion of trust (Reyes and Lensink, 2011, Nilsson et al., 2012).

Robison *et al.* (2002) states that the confusion over defining social capital in the literature stems from its merging with outcomes, arguing that social capital should only be defined as what it is and not what it can do. Likewise Portes and Landolt (1996) note that the problem of defining social capital is because of blurring lines between where it comes from, what it is and the consequences of it. Fine and Lapavitsas (2004) argue that social capital is a confusing concept that does not bring together, as it intends, the analysis of economy and social relationships. Ultimately these definitional problems around social capital can greatly impact its capacity as an usefully applicable concept (Dufhues et al., 2011). There are a variety of ways in which the concept is measured in the empirical research, from more concrete measures such as membership growth within a group (Adhikari and Goldey, 2010, Asfaw et al., 2009, Gotschi et al., 2009) to less tangible yet by no means less valuable indicators such as trust or participation (Botelho, 2013, Reyes and Lensink, 2011, Knack and Keefer, 1997).

It could be argued that the way social capital is measured depends on what question is being asked and ultimately, what level of social capital is under interrogation (Grootaert et al., 2004). Putnam's (1993) definition of social capital is defined at the macro level, based on the question it is attempting to answer; differences in economic performance between North and South Italy. This contrasts with much of the research conducted in partnership with the World Bank at the household level (Grootaert 1998, Grootaert 1999, Grootaert *et al.* 2004, Rishna and Sharder, 1999, Narayan, 1997), regarding social capital as a household asset rather than at the national, regional or societal level. Table 2 outlines the definitions of social capital in the literature, categorised into different levels of analysis.

Table 2: Definitions of social capital, by level of analysis

Level of social capital	Characteristics	Sources
Macro	Social capital at a societal and/or geographical	Coleman (1990)
	level	Putnam (1993, 1995)
Meso	Social capital within collective organisations,	Uphoff and Wijayaratna
	typically co-operatives	(2000)
Micro	Social capital held among individuals and as an	Grootaert (1998, 1999)
	asset for households	

A distinction in the development literature developed by Uphoff and Wijayaratna (2000) that gives conceptual clarity to social capital at the organisational level is *structural* and *cognitive* social capital. Structural social capital includes roles for decision making, rules, procedures and precedents that support collective action. It makes it easier to resolve conflicts, reduces transaction costs and enables social learning. Cognitive social capital consists of the norms, values, attitudes and beliefs that incline people to cooperate. Structural social capital could be best described as the *hardware* of social capital in that it provides a structure for cooperation to operate in, whereas cognitive social capital could be thought of as the *software* of social capital in that it is the programming which feeds into a structure and is conducive for cooperation. These two dimensions are reinforcing and there is a degree of overlap between them (Adhikari and Goldey, 2010, van Rijn et al., 2012).

Since the present study focuses on how groups of farmers operate in GVCs, it adopts Uphoff and Wijayaratna's (2000) definition of social capital at the organisational level. Within the context of the research objective; to uncover how social capital among farmers is shaped by the governance of a GVC, the distinction between the two types of social capital provides a thought-provoking proposition. If structural and cognitive social capital display different characteristics, then the process by which each is shaped by governance may also be different. This is a line of enquiry pursued in the thesis.

This section presented the debate over the definition of social capital, settling on Uphoff and Wijayaratna's (2000) definition to provide the conceptual clarity required to conduct an empirical study. The next section moves the discussion onto the benefits and detriments of social capital in the development literature.

2.4.2 Social Capital Benefits

Given the prominent position of collective organisation in development studies (Vajja and White, 2008, Fromhold-Eisebith and Eisebith, 2005, Rosenfeld, 2002), social capital has been elevated to the 'missing link' in the development discourse because it is argued that the concept goes some way in explaining why there has been little or no rural development in cases where other conditions for success exist (Grootaert, 1998). Meinzen-Dick *et al.* (2004) argue that social capital now has the same recognition in the literature as natural, physical, financial, human and political capital and there is a broad consensus in the development literature that social capital is a critical element of rural development (Fafchamps, 2006). This section reviews the empirical literature on the benefits of social capital, organised into three levels as noted in the previous section; macro, meso and micro. Followed by this is a discussion of the detriments of social capital.

While research on the macro impact of social capital has been paid less attention compared to the meso and micro levels, the foundations of the social capital can be found at the macro level. Putnam's (1993) original study that popularised the concept made the case that, through comparative case studies of regional governments in Italy, social capital has economic and democratic benefits for societies. Likewise Putnam's (1995) later work, looking at bowling league membership in the U.S. (alongside other examples), argued that a rise in bowlers but a fall in bowling leagues had negatively impacted on relationships among members of society and ultimately resulted in political disengagement from the system. Goetz and Rupashingha (2006) on a study in local U.S. communities finds that society measures such as voter turnout, number of NGOs and participation in the census is reduced when social capital is eroded. El-Said and Harrigan (2009) look at the linkage between social capital and political responses to welfare changes across the Middle East and North Africa. In addition to benefits within a political context, there is also evidence of maco-economic benefits. Knack and Keefer (1997) use the World Values Survey to measure the relationship between social capital and macro-economic performance, showing that social capital is not just linked with higher incomes, but equality of incomes as well.

While the literature on social capital at a macro level is more limited than other levels, a key theme that emerges from this stream is the role of institutions. An empirical study by Fafchamps

(2004) on a dozen African countries indicates that formal institutions are important only where transactions are large enough to warrant legal action, indicating that economies characterized by small transactions depend more on social capital and trust to regulate transactions — a point that is reiterated by the author elsewhere (Fafchamps, 2006). Baland and Platteau (1998) theorise that there is a need for stronger institutions in societies where social capital is low and vice versa. Botelho (2013) analyses the relationship between social capital and institutional trust in Bolivia within the context of national decentralisation, suggesting that there is a relationship between interpersonal trust and institutional trust and that institutional trust is higher in those organisations with a local presence such as indigenous authorities and municipal governments. Botelho's study suggests there are linkages between different levels of social capital.

Within the development literature, social capital has been extensively discussed at the meso level, due in large part to the concept of collective action far preceding the concept of social capital. The language around both concepts in the literature is similar because the conditions by which collective organisations arise and the benefits that they create mirror that of social capital (Meinzen-Dick et al., 2004). Social capital is critical to every functioning of a collective group, from its creation where initial investments are required by members and demands of members placed on leaders, to the rules and sanctioning that regulates collective action (Nilsson et al., 2012).

Before the development literature adopted collective action as part of the 'development mix', collective enterprises had a long history in Europe. As early as the 13th Century, milk producers in France and Switzerland formed farmer cooperatives to pool milk to make cheese (Poole and de Frece, 2010). However it was not until the Industrial Revolution in the late 18th Century and the 'Rochdale Equitable Pioneers' were formed in Britain that a modern idea of a cooperative first came to light (Hind, 1999). As Hind notes, although the cooperative movement was generated in Europe and elsewhere within the context of the industrial revolution, collective organisations that resemble those of the Rochdale Principles in the developing world did not; not least of all because they did not go through the kind of industrial revolution that countries in the Northern hemisphere did. Given the conceptual similarities with social capital, it is not surprising that both the form and success of collective organisation varies to such a degree depending on context (Velez et al., 2010, Cardenas and Ostrom, 2004, Cardenas et al., 2011, Henrich et al., 2010, Prediger et al., 2011, Serra, 2011).

While there are a range of different types of collective organisation, from share-holder firms to non-profits (Mersland, 2009), cooperatives tend to be the most widespread type of organisation. There are roughly 750,000 cooperative organisations in the world which serve 730 million members (Ortmann and King, 2007), although the cooperative movement has been considerably more widespread and successful in North America and Europe than in the developing world (Barton, 2000). As Ortmann and King (2007) note, the attempt to organise farmers in developing countries have often failed, even though collective action has the potential to drive agricultural development in such countries. Yet despite the perceived failure of collective organisations to make the gains in developing countries that were expected from them, there still exists the notion that collective organisation has an important poverty alleviating role to play (World Bank, 2008).

Transaction costs – an important concept behind collective action as well as social capital, was first advocated by Williamson (1981). Fukuyama (1995) sums up the link between transaction costs and cooperation based on trust: "Trust can dramatically reduce what economists call transaction costs - costs of negotiations, enforcement and the like - and makes possible certain efficient forms of economic organisation that otherwise would be encumbered by extensive rules, contracts, litigations, and bureaucracy." (p. 90). Collective action acts as a mechanism to reduce transaction costs and therefore helps negate the weaknesses associated with size of smallholder farmers (van Rijn et al., 2012, Nilsson et al., 2012), especially in developing countries where strong institutions are missing (Fafchamps, 2006).

Collective action has faced a great deal of scepticism in parts of the literature because of models formed from game theory that suggest collective action is inherently flawed. Two models in particular have created doubt. The 'Prisoner's Dilemma' suggests that while it is in their collective best interest to do so, individuals may not cooperative because the collective good conflicts with the rational self interest in the face of potential cheating (Hardin, 1971). The 'Tragedy of the Commons' likewise suggests that collective action theory will likely fail because of free riding, especially within the context of resource depletion (Hardin, 1968). These notions represent a challenge to collective action because they suggest that, in principle, collective organisations are inherently flawed (Lichbach, 1996). However as Bardhan (1993) notes, their conclusions are based on abstract games which do not necessarily reflect reality and while they are analytically useful, such games are too rigid and mechanical to cope with nuanced internal group dynamics. Indeed where the game has been repeated, trust and new social norms can

develop between participants which reverses the single-game outcome of the Prisoner's Dilemma (Ostrom, 2000).

Outside of a game theory environment, the empirics of collective action have demonstrated benefits for farmers. Collective organisations can reduce fixed transaction costs in terms of information search, negotiating price and enforcement, as well as variable transaction costs that depend on how much is traded such as transportation costs (Key et al., 2000). Staal *et al.* (1997) in case studies on dairy marketing cooperatives in Kenya and Ethiopia shows that farmers have been able to reduce the costs of dealing with buyers through producer organisations. Roy and Thorat (2008), using a case study of grape growers in India who successfully integrated into an export chain, demonstrate that farmers in collective groups earn significantly higher incomes than those outside of the group, even when controlling for potential selection biases. In addition, collective organisations enable greater bargaining power against buyers (Thorp et al., 2005) and improve access to finance, technology and market information (Markelova et al., 2009). Collective action can also facilitate access to emerging high-value chains (Narrod et al., 2009), for example dairy marketing groups in Ethiopia (Holloway et al., 2000) and coffee cooperatives in Costa Rica (Wollni and Zeller, 2007).

Many other studies support the idea that organised groups of rural actors that are able to coordinate their actions leads to particular development outcomes, including: innovation and technology take-up (Deroian, 2002, Oreszczyn et al., 2010, Fonte, 2008, Lambrecht et al., 2014); ethical brand legitimacy (Renard, 2003); market development in alternative food chains (Sage, 2003, Morris and Kirwan, 2011); developing local governing models (Brunori and Rossi, 2007, Bebbington et al., 2005); competing in distant markets (Schmitz and Nadvi, 1999); natural resource management and conservation (Bodin and Crona, 2008, Warriner and Moul, 1992, Mahanty, 2002); agricultural incomes (Weijland, 1994, Schmitz and Nadvi, 1999); non-farm incomes (Deichmann et al., 2009); organic practise take-up (Milestad et al., 2010); effectiveness of environmental policy (Morris, 2004, Burgess et al., 2000, Whelan, 2007); and rural tourism (Saxena and Ilbery, 2010, Arnaboldi and Spiller, 2011). Narrowing down to the problems that agri-chain actors face: small transaction sizes, strategic default, opportunism (cheating on contracts), monopoly power and limited political power; can be addressed through coordinated action among organised groups of actors (Poulton et al., 1998, Poulton et al., 2010).

Collective organisations are formations of social capital and ultimately, social capital is a prerequisite for collective action (Theesfeld, 2004). Social capital is something that exists within, but is not equivalent to collective organisation; as Uphoff (2000) notes, social capital is best understood as the stock variable made up of social connections from which collective action flows.

Social capital at the meso level has also been shown to improve farmer productivity in developing countries. Uphoff and Wijayaratna (2000), in their conceptual paper on structural and cognitive social capital, demonstrate how these two dimensions improved the productivity of Sri Lankan farmer organisations. Binam *et al.*'s (2004) survey among smallholder farmers in Cameroon finds that social capital facilitated efficient production through the sharing of information of practices at farmer clubs which then spilled over to those who were not members such as family. In a study in rural Uganda on the impact of a social capital training project for female farmers, Vasilaky (2013) notes that the training led to increased productivity by 50% and had a significant effect on yields.

Agricultural innovation is also a cited benefit of social capital for farmers. In a panel survey on the relationship between different dimensions of social capital and agricultural innovation, van Rijn *et al.* (2012) show that social capital is associated with greater adoption of innovation because it allows for more access to knowledge and resources. However the authors also find that cognitive social capital is negatively associated with innovation, suggesting this could be the consequence of creating an inward looking environment and/or pulling away time and resources that could otherwise be utilized for adoption.

A relevant benefit of social capital among farmers integrating into GVCs is the adoption of standards and access to markets. From a survey on the impact of EU private food safety standards on pesticide use and farm-level productivity among small-scale vegetable producers in Kenya, Asfaw *et al.* (2009) argue that a lack of social capital is a major barrier that limits the adoption of standards among smallholders. Kaganzi *et al.* (2009), looking at a farmer's group in Uganda that successfully sold potatoes to a fast-food outlet in Kampala, suggests that social capital was critical for the organisation to access this channel. Likewise, Melo and Wolf (2007) in a case study of Ecuadorian bananas find that social capital enabled farmers to gain Fair Trade certification. While the evidence suggests that social capital is a critical factor for adopting the necessary standards to access lucrative markets, in some cases support from service providers

such as NGOs were a critical factor in enabling social capital to be utilized to access these markets (Kaganzi et al., 2009, Melo and Wolf, 2007). However the complexity of the chain also moderates the scope for social capital to improve farmers' positions; chains which are high value and complex present a greater opportunity for collective organisations to shorten in a way where smallholders are able to better access markets which were either out of reach because of a higher stringency of standards or had to be accessed through multiple intermediaries (Fischer and Qaim, 2012, Poulton et al., 2010).

Microfinance and group lending are typical *strategic research sites* for social capital because they require significant levels of trust to work successfully (Mackean, 2010, Woolcock, 1998). Dufhues *et al.'s* (2011) study on the repayment behaviour of debtors in Thailand finds that while strong ties among farmers have a significant and positive influence on repayment behaviour, weak ties among farmers and between farmers and others in a more powerful position (measured by occupational distance) does not; although this is somewhat disputed by another study in Thailand (Dufhues et al., 2013). Reyes and Lensink (2011) find that social capital enables access to financial capital in Chile. Shoji *et al.* (2012) looks at the reverse causality, suggesting that credit constraints negatively impact social capital in Sri Lanka because people are unable to invest the necessary resources (expenditure for group activities and participation in maintaining public goods) in creating social capital.

There are also benefits of social capital that create broader outcomes that go beyond groups. Holloway and Lapar (2007) introduce the concept of the *neighbourhood effect*, meaning the propensity of neighbours to make the same decisions as one another, described as the *correlation of behaviour*. They show that the neighbourhood effect on farmers in the Philippines drove greater participation in markets. Likewise Binam *et al.* (2004) also demonstrates a strong spill-over impact through the sharing of information and practices.

In addition to the macro and meso level, the empirical literature has shown there are benefits to social capital at the household level. More specifically, social capital has been shown impact on household income and poverty reduction efforts. Much of this research stems from studies conducted in conjunction with the World Bank. The Social Capital Assessment Tool, that is advocated by the World Bank, measures social capital at the household level (Krishna and Shrade, 1999).

A study by Grootaert and Narayan (2000) indicates that social capital increases household welfare and can lead to poverty reduction. Narayan and Pritchett (1999), using the Social Capital and Poverty Survey in rural Tanzania, demonstrate how social capital is positively associated with the level of income. In a survey on household welfare in South Africa, Maluccio *et al.* (2000) find that social capital had a significant impact in 1998, although less of an impact earlier in 1993. When compared to human capital, there is also evidence that social capital has a stronger positive relationship with household welfare. Narayan and Pritchett (1999) find that social capital had a 4 to 10 times larger impact than human capital in rural Tanzania and Grootaert (1999) finds it twice as effective in Indonesia when compared to human capital at the household level. In addition to income, there is also evidence that social capital reduces the costs of migration (Henning et al., 2013) and increases individual contributions to public goods (Janssens, 2010).

While the empirics support the notion of the relationship between social capital and poverty reduction, the direction of causality could be under question. For instance, there is the suggestion that a barrier to social capital development is endemic poverty (Woolcock, 1998, Cleaver, 2005, El-Said and Harrigan, 2009), particularly given it requires an investment in money and/or labour (Narayan, 1997). This would suggest that the relationship is much more complex than a simple cause and effect and possibly interrelated, such that those who are in a relatively positive position benefit the most while those who are at a subsistence level may not be able to maintain social capital; while social capital may rise broadly, only some will ultimately benefit.

This section has outlined the benefits of social capital highlighted in the development literature. Table 3 shows the benefits of social capital, organised into its macro, meso and micro dimensions. While social capital is largely regarded as a positive for development, there is also evidence to suggest that there are negative implications. The next section reviews the detriments of social capital.

Table 3: Benefits of social Capital, by level of analysis

Level of social capital	Benefits	Sources
Maco	Democratic engagement, macro-	Putnam (1993, 1995); El-Said and Harrigan
	economic performance, role as an	(2009); Knack and Keefer (1997); Fafchamps
	institution and institutional trust	(2004); Baland and Platteau (1998); Botelho
		(2013)
Meso	Productivity, innovation and adoption,	Uphoff and Wijayaratna (2000); Binam et al.
	market access, repayment behaviour,	(2004); Vasilaky (2013); Rijn <i>et al.</i> (2012);
	information sharing, neighbourhood	Asfaw et al. (2009); Kaganzi et al. (2009);
	effect	Melo and Wolf (2007); Dufhues et al. (2011,
		2013); Reyes and Lensink (2011); Shoji <i>et al.</i>
		(2012)
Micro	Household income, poverty reduction,	Grootaert and Narayan (2000); Narayan and
	reduced migration costs and	Pritchett (1999); Maluccio <i>et al.</i> (2000);
	individual contributions to public	Grootaert (1999);
	goods	

2.4.3 Social Capital Detriments

While the benefits are well established in the literature, another stream suggests that there are negative consequences of social capital. Portes and Landolt (1996) make the case that social capital can lead to antisocial norms and exclusion which challenges the so called 'missing link' advocacy (Grootaert, 1998). Cleaver (2005) supports this position by arguing that instead of "oversimplified mantras" (p. 904), it needs to be recognised that social capital may structurally reproduce exclusion for the poorest rather than provide a cure for it. Likewise Bebbington (2002) argues that social capital can be a mechanism for perpetuating patterns of inclusion and exclusion. Vervisch et al. (2013) also argue this point, noting that social capital should not be separated from its embeddedness within existing power relationships. Coming back to the different levels of social capital, the detriments of social capital highlighted in the literature is positioned as originating at the societal level where existing power relationships exist which then consequently shapes the meso and micro levels.

Social capital can have a particularly negative effect on existing gender inequality. Gotschi *et al.* (2009) find that women in farmer groups in Mozambique have less chance of being elected

group leader and as a result the group agenda naturally favours men as the main beneficiaries of group benefits. Maclean (2010) based on a case study in rural Bolivia argues that because cultural traditions have such a significant impact on how social capital is shaped, the way that those cultural traditions treat women therefore also shapes how social capital will impact on gender. Looking at seven micro-finance programmes in Cameroon, Mayoux (2001) claims that although micro-finance programmes that build social capital make a significant contribution to women's empowerment, it may undermine empowerment where power relations are ignored. The reverse causation also appears to be true such that when women have greater participation in groups, social capital tends to be much higher in those groups (Westermann et al., 2005). Vasilaky (2013) shows that when social capital interventions are aimed at female farmers compared to standard extension projects, there is a more significant impact on productivity.

Closely linked to exclusion is the notion of elite capture that can have *anti-social effects* (Goodhand and Hulme, 1997) and is defined as when power within a social system becomes increasingly centralized and able to reap benefits that would otherwise be distributed across the social system as whole (Vervisch et al., 2013). Adhikari and Godley (2010) in a study using qualitative and quantitative methods on community based organisations in rural Nepal note that a major problem with social capital in these organisations is elite capture of resources and that elites tend to be able to break rules with impunity, corresponding with Putnam's (1993) notion that sanctions are less likely to be imposed upwards. Vervisch *et al.* (2013) in an ethnographic study on community associations in Uganda argues that social capital between farmers and other actors in a more powerful position leads to elite capture if not accompanied by sufficient social capital among farmers. In particular, the authors lay out how there can be legitimacy and corruption in the same instance, evidenced by religious leaders who were allowed to continue embezzling community groups because of the wider religious context of the case study. This corresponds with other studies in the literature on how social capital can lead to elite capture (Malla et al., 2003, Marcus and Acharya, 2005).

This notion of social capital as a concept that can produce harm as well as good reflects a political economy perspective on the concept in that it takes into account power relations that reinforce existing hierarchies (Vervisch et al., 2013). This goes against the somewhat more simple communitarianism position which sees social capital as inherently good for development (Woolcock and Narayan, 2000). It appears evident that the political economy perspective is a more accurate perspective given the empirics on the negative consequences of social capital.

With a rich account in the literature on the benefits and consequences of social capital, the discussion now moves to the conditions by which it is formed on, where there is significantly less understanding and agreement in the literature.

1.1.1 Conditions for Social Capital Formation

While Putnam (1995) is generally considered to be the scholar who popularised social capital, Coleman (1990), an early theorist of social capital, was the first to create a theoretical framework for social capital formation. Coleman argues that there are three necessary conditions for the presence of social capital: 1) *closure* which is the power of a social system to place pressure (i.e. sanctions) on other members; 2) *stability* or the extent that members will stay where they are as opposed to individual mobility, a dynamic especially relevant for rural areas because of the static nature of family mobility (Beard, 2007); and 3) *communitarian ideology*, which could be best described as the combination of culture and cognition. Subsequent theoretical discussions mirror these conditions, typically referring to rules and sanctioning, diversity of norms and culture. The discussion on the conditions that lead to social capital formation begins by reviewing the empirics and debate over these three dimensions and then moving onto new dimensions that have emerged in the literature since Coleman's framework.

Coleman's (1990) dimension of *closure* corresponds closely with the notion of rules and sanctions. The argument for rules and sanctions presents an interesting proposition for social capital in that it reduces the needs for extensive rulemaking in economic organisation (Fukuyama, 1995), yet also requires such rulemaking to function in the first place. Rules and sanctions are there to ensure that the group interests are put above the individual interest, sometimes described as the 'rules of the game' (Taylor, 1982). The use of rules for economic organisation stems from the New Institutional Economics perspective which advocates institutions as necessary to influence individuals' human behaviour for the benefit of the whole (North, 1990). Within the discourse on the role of the institutions, Uphoff (1993) distinguishes between two, overlapping types; the 'invisible hand' that provides general rules and incentives that guide behaviour (e.g. the law), and institutional organisations; institutions that are 'made' and have particular roles and responsibilities (e.g. The World Bank).

Hayami (2009) suggests that institutions are an outside entity separate from social capital even though the two are closely aligned. However, this point of view clashes with Uphoff and Wijayaratna's (2000) definition of structural social capital which incorporates rules that facilitate mutually beneficial collective action as a dimension of social capital as opposed to a factor that influences it from the outside. Pretty and Ward (2001) also include common rules and sanctions as definitional elements of social capital. Regardless of these disputing perspectives, there is a broad consensus in the literature that enforceable rules are a determinant for social capital formation.

Molinas (1998) argues that a determinant of social capital is the extent that sanctions are enforceable and rewards for cheating outside of the rules are high. Woolcock (1998) in a review paper on social capital and economic development presents a similar conclusion that weak or unenforced rules are detrimental to social capital formation. Cechin et al. (2013) in a study on Brazilian cooperatives finds that more market-driven or hierarchical cooperative structures create greater commitment towards developing social capital by members, which the authors suggest is because of the fear of being excluded and therefore represents a sanction. Barham and Chitemi (2008) links rules with the maturity of a group in their case study of Tanzanian farmer groups: "it is clear that the group maturity and activity level variables are positively associated with a group's ability to improve its market situation... Unlike new groups, mature groups had a set of institutions to guide group behaviour" (p. 58). In a discussion paper on the relationship between social capital and institutions, Nooteboom (2007) argues that rules or habits that enable or constrain action and carry sanctions for non-compliance are necessary conditions. Adding nuance to the role of sanctioning, Nooteboom notes that sanctions can be not just material but also non-material, for instance social exclusion from a community or reputational damage.

An interesting perspective from Baland and Platteau (1998) is that the degree of rules and sanction mechanisms that are needed ultimately depends on the level of existing social capital. If there is a group with low social capital which the authors coin the *distrust equilibrium*, there is a need for more hierarchical regulatory structures, whereas the necessity of such systems diminish as social capital rises. Although only a theoretical discussion, it suggests that while in the early stages of social capital formation rules are critical, they can then be substituted by social capital if social capital increases to a sufficient level.

While the literature strongly advocates rules and sanction mechanisms, there may also be friction created as a result. The breakdown of social capital within a group of farmers is typically related back to dissatisfaction of its members (Nilsson et al., 2009). As cooperatives grow larger, management becomes increasingly autonomous and divorced from its members and there is greater need to enforce stricter rules and regulations (Hind, 1999). This change in the regulatory structure may also destroy social capital. As Nilsson *et al.* (2012) theorises, for cooperatives to be more competitive, they must streamline their business processes which requires more control – however members of such groups typically do not want to be controlled. The dilemma for fast growing collective organisations in particular is how management can streamline processes and put into place control mechanisms necessary for competing in competitive value chains without degrading the commitment of its members (Cechin et al., 2013). Therefore while enforceable rules are important for social capital, in some cases the two may conflict if they are considered too restrictive (Fulton and Giannakas, 2001).

A second condition for social capital theorised by Coleman (1990), and one which is disputed to a greater degree than the role of rules and sanction mechanisms, is the extent that a social system is stable; manifest in the extent that members will stay where they are as opposed to migrating to a different area. The intuitive argument for this condition is that where a social system is unstable through migration there are greater qualitative differences between people such as ethnicity and religion. This is highly relevant to rural areas because of rural-urban and rural-rural migration conflicting with the static spatiality of rural life (Beard, 2007), in essence suggesting that migration is a barrier to social capital formation when people leave or enter a geographic space.

Huffman and Feridhanusetyawan (2007) argue that when people migrate away from their place of home, social capital deteriorates because previous relationships weaken. Miguel *et al.* (2006), using Indonesian panel surveys, find that areas which experience industrialisation have higher social capital whereas periphery areas which do not go through industrialisation experience a reduction of social capital. The authors hypothesise that migration from rural areas to cities leads to lower social capital in those rural areas while bolstering social capital in industrialized places. Other authors support the notion that ethnic or religious diversity has a negative association with social capital because it disrupts the 'stability' of a social system (Woolcock, 1998, Huffman and Feridhanusetyawan, 2007, Beard, 2007, Klitgaard and Fedderke, 1995, Easterly and Levine, 1997, Castle, 1998, Mavridis, 2015). However, there is opposing evidence

that contradicts the role of diversity within networks of people (Bhattacharyya et al., 2004). There is also evidence that suggests the reverse where social capital improves opportunities to migrants; as Henning *et al.* (2013) notes, social capital can reduce the cost of searching for a job and information costs related to rural migration.

Closely linked with stability are cultural and historical factors, generally agreed to be a critical factor for social capital formation (Nilsson et al., 2012, Molyneux, 2002, Maclean, 2010, Woolcock, 1998). The relationship between culture and social capital is intuitive given that both are inherently universal, 'social' constructs within societies. As Uphoff and Wijayaratna (2000) note, social capital is embedded within culture and therefore it is inseparable from the formation of social capital, reflecting the wider issue of separating social capital from its causes and effects (Lyon 2000).

Going beyond the theoretical model of Coleman (closure, stability and communitarian ideology), other factors have been identified that influence social capital formation. Leadership is one key factor, as well as its associated dimensions of transparency and accountability. The social capital literature argues that for people to come together, rally around a shared interest and form a group, some form of leadership is necessary (Serra, 2011, Vollan, 2012, Goetz and Rupasingha, 2006, Krishna, 2004), especially during times where members of that group may have a particular propensity to leave or break the rules due to unfavourable circumstances at a given moment (Kaganzi et al., 2009).

Based on the notion that social capital is a lengthy process to build, time is a factor to consider (El-Said and Harrigan, 2009). However, what precisely is the length of time necessary for formation is debatable. Within the context of cultural and historical explanations for social capital formation (Maclean, 2010, Woolcock, 1998), hundreds of years would be a possible implication. However more recently there are suggestions that social capital could be built in much shorter time frames (Grootaert and van Bastelaer, 2002), with Krishna (2004) noting that this issue is "far from resolved" (p. 303). For instance, Kaganzi et al. (2009) in a case study of farmer groups in Uganda concludes that social capital was able to significantly build up within four to fiveyears. Khwaja (2009) also comes to a similar conclusion for rural Indian villages. However Lyon (2000) implies that social capital is a far more organic process than this and by its nature takes many years to develop.

Much of the theoretical debate around external influences of social capital has traditionally been concerned with the role of the state. Coleman (1990) sees it as a zero-sum relationship, regarding the state as a presence that "crowds out" networks of people, whereas Putnam (1993) argues for synergy between the state and social capital. Theoretically, the state should be an important agent in creating social capital based on a New Institutional Economics perspective (North, 1990). Given that rules and regulations are important for guiding behaviour in collective organisations in terms of enabling or constraining actions, and the state can play a role in setting appropriate rules and regulations from the outside, we should expect a complimentary role for the state in terms of social capital formation (Hayami, 2009, Barham and Chitemi, 2009). As Nooteboom (2007) argues: "countries vary in the extent that there are institutions that support trust, and to the extent that there are no such institutions, trust must be built entirely from relationships, and without institutional support that can be laborious and such trust can be fragile." (p. 30). Petro's (2001) influential study of the 'Novgorod Model' in Russia documents how the state played a powerful role in social capital development. Other authors support the potential for positive interaction between the state and rural social capital (Serra, 2011, Narayan and Pritchett, 1999).

With the exception of the role of the state, the above discussion has so far described mostly factors for social capital formation that are endogenous to rural areas. Even the issue of migration is put in terms of *stability* of a collective group (Coleman, 1990). A contentious debate exists on the extent that outside agents can influence the development of social capital. Lyon (2000), in a case study on social capital in Ghana, argues that trust (a closely related concept to social capital) cannot be influenced from the outside. Likewise Vollan (2012) looks at externally initiated collective action in South Africa, finding that that a higher number of externally initiated organisations have a negative effect on trust and reciprocity within a community.

Despite the above cases, there are some instances where social capital has been successfully created from the outside. Khwaja (2009) asks the simple question: 'can good projects succeed in bad communities?', to which the answer is yes, depending on the way interventions are designed (simplification, equitable distribution of returns and effective leadership). From a study on community based development projects in Indian villages, Janssens (2010) concludes that an external intervention led to social capital development, however she also highlights that this intervention was through bottom up (directed from rural spaces) rather than top-down (directed from above) mechanisms. Likewise, Vasilaky's (2013) study of interventions in rural Uganda

shows how social capital can be externally initiated when designed in a way where it grows from the bottom up, in this case through mentoring programs between female farmers. Grootaert and Narayan (2004) find that NGOs can play an important role in building social capital, but support must be attuned to context specific factors (political, institutional and economic) and mediated through local organisations.

While a number of studies suggest that social capital formation in rural areas can under certain circumstances be influenced from the outside, the role of buyers and GVC governance in social capital formation is a relatively unexplored issue. Theoretical discussions thus far have tended to take a negative view of its role. Messner (2004) proposes that integration into governed GVCs may translate into tensions between rural actors. For instance, it could be the case that relationships with buyers is regarded by some farmers as the relationship that matters most, which in turn leads to declining attention being paid to relationships among the group (Rabellotti, 2004), especially given that social capital requires investments in time (Shoji et al., 2012). Pretty and Ward (2001) also suggests that demands from the outside may impact on group cohesion: "There may be cases, however, where a group might benefit from isolation, because it can avoid costly external demands" (p.212). In a typology for different investments for linking farmers to markets, Bingen et al. (2003) argues that investments financed by private buyers do not lead to the development of social capital as a priority. All of these theoretical discussions imply that buyers are either ineffective or destructive for social capital; however this has not been seriously explored in the empirical literature.

Based on the discussion so far, the question of how governance and social capital could be linked is a pertinent one. Globalization has opened the door to farmers to integrate into GVCs and, as a result, benefit from reaping higher incomes and sustainable growth research while creating a new set of challenges for scholars (Kaplinsky and Morris, 2002). The structure of agri-food chains in the developing world are going through a dramatic change, with vertical coordination in GVCs becoming the choice organisational relationship (Poole and de Frece, 2010) and governance playing an ever prominent role in the literature as a result (Gereffi and Lee, 2012). What is absent from the empirical literature is what this means for social capital among farmers who participate in these GVCs. There are still gaps in a framework for social capital formation (Staber, 2007, Durlauf, 2002, Durlauf and Fafchamps, 2005, Miguel et al., 2006) and the concept of governance could shed light on this issue. If governance of GVCs shapes participation of farmers,

then it is legitimate to ask whether governance of GVCs shapes participation *among* farmers. The next section reviews the GVC and governance literature.

2.5 Global Value Chains and the Centrality of Governance

2.5.1 A Global Value Chain Definition of 'Governance'

Governance is a multi-dimensional term that incorporates a number of overlapping definitions (Campos and Nugent, 1999, Gereffi et al., 2001) and therefore it is important to briefly outline some of these notions and identify which definition is followed in this thesis. The United Nations Development Programme (UNDP) (UNDP, 1997) provides a broad definition of governance: "[Governance] comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercises their legal rights, meet their obligations and mediate their differences" (p. 3). This definition has a societal dimension to it where governance is conceptualized as the interaction among actors in society.

Similarly, Marshall and Douglas (2005, 1997) define governance in terms of support at the local level; specifically service provision and representation. As defined by the authors, service provision is the transfer of goods and services to rural actors to assist in the accumulation of capital required to generate rural development, whereas representation is conceptualised as building relational blocs that give rural actors a larger voice in the rural development process as well as a way to coordinate actors to achieve shared objectives. This has some commonalities with the broader definition offered by the UNDP but is narrowed down to institutional structures at the rural level. Furthermore this definition is very much a supportive conception of governance which is more in line with the rural cluster literature that sees institutional structures as enabling entities (Porter, 1998, Schmitz and Nadvi, 1999, Bair and Gereffi, 2001) as opposed to dictating the terms of participation for agri-chain stakeholders that is associated with governance in the GVC literature.

Focusing on governance in GVCs, we see a very different understanding of what constitutes 'governance'. GVCs are defined as supply chains that go beyond national borders and represent local-global trade linkages between developing and developed territories and can be understood as a series of activities that generate particular economic rewards for actors, with a specific focus on the rewards for developing countries (Gereffi and Fernandez-Stark, 2011).

Consequently, governance in GVCs sees buyers as principal coordinators of farmers rather than institutions (Gereffi et al., 2005).

Within the context of GVCs, Gereffi (1994) defines governance as the: "authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain" (p. 97). In a similar fashion, Humphrey and Schmitz (2004) define governance as the notion that "some firms in the chain set and/or enforce parameters under which others in the chain operate" (p. 96). Reardon and Farina (2002) conceptualize this as 'meta-management', meaning the methods by which dominant firms manage their supply chain. Clearly this is a much more specific and narrowly defined understanding of governance compared to that of broader definitions of governance described earlier. It is also different in nature; where the UNDP definition and the Marshall and Douglas definition sees governance as supportive mechanisms, the GVC conception sees governance as dictating the terms of participation. Since the research here is specifically concerned with GVCs and borrows heavily from that strain in the literature, governance as defined in the GVC literature is followed.

2.5.2 The Concept of Governance

World systems theory (Wallerstein, 1974) and its subsequent unit of analysis, Global Commodity Chains (GCCs) (Gereffi, 1994, Bair and Gereffi, 2001, Gereffi, 1999), incorporate the context and histories of regions and refrains from the generalizations to the same extent as dependency theory (Barnett, 1988, Gwynne, 2008). GCCs evolved from world systems theory but with striking differences.

Similar to its close cousin dependency theory, world systems theory has a highly structuralist view of trade linkages and development. It regards the world-system, rather than the nation, to be the unit of analysis when it comes to understanding development. GCCs likewise sees linkages across national borders to be important for understanding the processes of development, through the analysis of power structures in supply chains. However as Bair (2005) describes, the divorce between World Systems Theory and the GCC approach arose from a conflict between those who believed there was little scope for growth for developed countries without revolutionary change of trade links and those who saw an opportunity for improvement from those links, albeit under certain conditions - the most important condition being that of chain 'governance'.

Although the GCC approach looks at power relations and governance structures in global chains which are arguably important aspects, there is little focus on elements that the business and economics literature contain such as transaction costs and trade economics – a gap that the GVC approach addresses; as Bair (2005, p. 154) notes:

"What distinguishes the GVC approach from the GCC paradigm to which it is closely related is the greater influence of the international business literature on its analysis of global production networks, as opposed to the more sociological orientation of the earlier GCC framework, and a more pronounced interest in the policy implications of chain research"

The departure from GCCs to GVCs is also based on opposition to the term 'commodity'. Commodity suggests limited value adding opportunities, whereby the GVC approach takes into the account that there are activities along the chain, such as processing and packaging, which convert materials into higher value products. This is an important distinction given that the location of such activities determine where gains are captured along the chain (Kaplinsky, 2004b). Bair suggests that the widening scope of global chain analysis from various different disciplines led to the overarching term 'Global Value Chains' as a way to incorporate the diversity of growing global chain research. What ties all this literature together is the focus on the nature of relationships among various actors in the chain and its implications for development (Humphrey and Schmitz, 2002).

The important governance construct in the GVC literature comes from the work carried out by Gereffi *et al.* (2005) and Humphrey and Schmitz (2002). These were the first serious attempts in the literature to develop a governance concept, describing levels of coordination and power asymmetry in chains, separating itself from the GCC literature. At the core of GVC governance is a 'lead firm' who dictates to other enterprises in the chain "what", "how" and/or "how much and when" something should be made (Giuliani et al., 2005). Given that these lead firms are typically buyers in the buyer-supplier relationship and this trend towards buyer-driven chains is ever growing (Gibbon and Ponte, 2005, Gereffi and Lee, 2012, Reardon and Farina, 2002), they will be referred to as simply 'buyers' henceforth.

The discussion above has laid out how governance differs in the GVC literature to how its defined elsewhere, followed by how the concept evolved from World System Theory and GCC research. Governance is a complex, multi-faceted concept and Schmitz (2005) advises that its study should begin by 'unpacking' the concept into its various dimensions. The rest of this section breaks down governance into its composite dimensions.

2.5.3 Standards as a Governance Mechanism

What is inherent within the 'GVC approach' proposed by Gereffi *et al.* (2005) is the role of standards. The existence of governance within a GVC context is dependent on standards – without them, the rationale to govern the chain is lost:

"The question of governance arises when some firms in the chain work to parameters set by others... when one firm coordinates the product, process and scheduling/logistics parameters followed by another firm." (Humphrey and Schmitz, 2004, p. 97)

It therefore makes sense that, given its dominant role in the GVC discourse, a discussion of GVC governance addresses the role of standards. Humphrey and Schmitz (2004) distinguish between these three types of standard and how they translate into requirements for rural, agri-chain actors in GVCs:

- What is to be produced: product design and specifications. Examples of specifications are appearance and quality (Reardon and Farina, 2002);
- How it is to be produced. This involves the definition of production processes, which can include factors such as the technology to be used, quality systems, labour standards and environmental standards. An example of a process standard is Hazard Analysis and Critical Control Points (HAACP) (Reardon et al., 2001b) or Fair Trade certification (Nadvi and Waltring, 2004); and
- How much of something is produced and when: production scheduling and logistics.

Although buyers coordinate other enterprises into meeting standards, they do not necessarily create them. Standards can be set by standard setters like the International Labor Organisation, private standards set by coalitions of buyers as is the case of Global.G.A.P. (previously

EUREPGAP) (Dolan and Humphrey, 2000) or a mixture of both where the lines between public and private are blurred, for example the Fair Trade certification (Raynolds, 2012).

Although buyers are responsible for implementing their own private standards, they also co-construct public standards with standard setting organisations. A notable development in this regard is a major consortium of five food multinational corporations, named the European Chair in Food Safety Microbiology, that seeks to build an international public standard for food safety parameters (Wageningen University, 2012). This particular interaction between buyers and standard setting organisations has been addressed by other research (Dolan and Humphrey, 2000, Mutersbaugh, 2005). It also does not relate to interactions with farmers specifically because it is an interaction that takes place between buyers and standard setting organisations, even if the interaction has an impact on farmers in the form of co-constructed public standards (Messner, 2004).

The motives for privately set standards range from securing consumer confidence through identifiable accreditation, to reducing control and search costs when sourcing from suppliers (Messner, 2004). While the origin of standards may differ, they are all in essence a method for codifying the coordination of farmers along the chain which makes it an important talking point in a discussion of GVC governance. The governance framework reflects the role of standards in terms of the complexity and codifiability of information required for suppliers to meet them.

The literature on GVC standards is separated by two concerns; one normative and the other descriptive. The first questions whether private standards, set almost always by agri-chain buyers (Reardon and Farina, 2002), are ultimately 'good or bad' for developing regions. There is a generally negative judgment on the consequences of private standards for rural development (Maertens and Swinnen, 2009). It is argued that private retail standards increase inequality within developing countries; particularly between farmers that are able to comply and those that are not (Herzfeld et al., 2011), as Reardon and Farina (2002) note:

"The lucky – a relatively small subset of the original set of suppliers – tend to find that meeting the standards, with formal certification in hand, benefits their business, opens new opportunities. The excluded tend to find themselves relegated to waning and unprofitable markets."

There is a consensus that private standards are taking a larger role in determining the formation of GVCs in developing countries (Von Braun, 2003, Reardon and Farina, 2002), while conversely,

public standards are playing a diminishing role (Jia and Huang, 2011, Henson and Reardon, 2005). GlobalG.A.P., established by private retail consortium of European food retailers, is the ideal example where power over global agri-chains by private enterprises manifests itself through the implementation of private standards (Herzfeld et al., 2011). Indeed it is GlobalG.A.P. certification that is so often the golden ticket for agri-chain firms in developing countries to generate regional economic development (Henson et al., 2011).

Through survey data, Bai and Zhang (2010) find that public certifications in China do not signal quality or safety to Chinese consumers, suggesting that private certification is more significant in this regard. Henson and Humphrey (2010) review the impact of private retail standards on developing countries and conclude that private standards have undermined the legitimacy of global agri-chain standards such as those set by World Trade Organisation (WTO), the Agreement on Sanitary and Phytotsanitary Measures (SPS) and Agreement on Technical Barriers to Trade (TBT). We can observe a trajectory in the literature from normative questions over the rights and wrongs of private standards, towards the realization that private standards are here to stay and that understanding how rural regions can gain the most from tapping into them is where research should go. While smallholder farmers in developing countries face significant challenges in GVCs where private standards are evident, coordination among farmers represent a means to manage these challenges (Dethier and Effenberger, 2011), indicating that social capital among farmers within the framework of governance is a valuable topic to explore.

Global or public standards, although undermined by the dominating effect of private food standards, still play an integral role in global agri-chains in developing countries. Ransom's (2011) study on Botswana beef GVC finds that European Union directives and the World Trade Organisation trading regime which guides the production of beef has a significant impact on the way the chain functions. International Organisation for Standardization (ISO) certification has been addressed in the literature and represents a wider global standard that applies not just to agri-food but also manufacturing and other sectors as well (Herzfeld et al., 2011, Turner et al., 2000). What is telling in the ISO label is the idea of 'standardization', indicating that its purpose is to homogenize food standards across agri-chains. Messner (2004) and Reardon and Farina (2002) note that a rationale behind the use of private standards is differentiation between competitors as a source of competitive advantage.

Adoption of private and public standards in developing countries is a rich topic in the literature, namely because it is generally recognized that, compared to developed countries, the challenges facing developing regions in meeting agri-food standards are particularly acute and represent a major barrier to rural development (Henson and Caswell, 1999, Garcia Martinez and Poole, 2004). Standards place large demands on local institutional structures and require a restructuring process if chains are able to integrate into these complex GVCs (Fischer and Qaim, 2012).

It is clear that standards in GVCs have significant implications for rural systems and that with the growing prevalence of private standards, these implications will only intensify. Limited research has been conducted on what standards, as a dimension of governance, mean for the cohesion of farmers and collective organisations (Messner, 2004), despite it being understood that farmers and collective organisations change their behaviour when faced with standards (Nadvi, 2004a). Indeed, as Neilson (2008) notes, an inevitable consequence of growing implementation of private standards will be structural changes in how farmers organise.

As far as is known, only one empirical study, published after the present research had begun, has specifically touched upon the topic of standards and social capital. In a case study on Rwandan coffee producers and the impact of Fair Trade certification on social capital, Elder *et al.* (2012) encountered mixed findings, with Fair Trade certification having a negative association with farmers' trust in cooperative leadership but a positive association with participation of women. With the authors advising that more research is needed to better understand the consequences of certification on social capital, the present research explores this topic within the context of the relationship between governance and social capital.

2.5.4 Upgrading in Global Value Chains

Standards are the 'hurdles' that suppliers must jump to be able to effectively participate in a governed GVC. Where suppliers can meet standards with a low risk of failure, the necessity for buyers to support suppliers in the GVC diminishes. However where the capabilities of suppliers are weak, putting into question whether standards can be met, the incentive for buyers to provide support to improve *how* suppliers make products (efficiencies) and *what* products they make (products with greater value) increases (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007). Furthermore, governance also shapes the extent that suppliers can move

into different functions of the GVC (e.g. producers moving into the function of exportation). Upgrading could be an interesting aspect to explore with regard to a relationship between governance and social capital because if governance shapes process, product and functional upgrading, then it could also shape social capital formation given that all are unified by a change in capabilities and behaviour.

The notion of upgrading in GVCs moved the debate away from simply describing how power relations based on economic trade are governed between developed and developing regions and towards the question of how these relationships can be changed to the benefit of developing countries and regions (Gibbon, 2001, Gibbon and Ponte, 2008). Humphrey and Schmitz (2002) developed an upgrading typology of the different ways firms can change their relationship in GVCs and as a result, change the structure of governance:

- 1. Process upgrading: efficiencies in production;
- 2. Product upgrading: moving into products which have greater value per unit; and
- 3. Inter-chain or functional upgrading: applying competences in another stage of the chain.

The ability of firms to upgrade within GVCs is influenced by governance structure of the chain (Humphrey and Schmitz, 2002). As information becomes more complex and difficult to disseminate to suppliers, and the capability of suppliers falls (risk of supplier failure rises), chains become more controlled by buyers and functional upgrading is obstructed because buyers seek to keep command of their core competencies. However, when this happens, buyers are more inclined to guide suppliers into process and product upgrading since it is in their interests to do so. When information concerning standards is simple and easy to communicate, chains become more arms-length, product and process upgrading is limited because buyers are less likely to support suppliers. However functional upgrading is more likely within these conditions since suppliers are not blocked from expanding into other stages of the chain. A number of studies support this association between GVC structure and upgrading (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007, Ponte et al., 2014). It is generally considered that a middle ground between an arms-length, spot market structure and a hierarchical (fully vertical integrated) GVC enables the best chance for upgrading such that quasi-hierarchical governance spurs production and process upgrading and network governance generally supports all dimensions of upgrading (Messner, 2004, Humphrey and Schmitz, 2002).

Theoretically, upgrading of suppliers and participation in more sophisticated GVCs should boost local wages in exchange for their contribution to greater local value creation (Palpacuer and Parisotto, 2003). On this basis, value chain development has become an advocated strategy for rural economic development and poverty alleviation (M4P, 2008, Campbell, 2008, Nadvi, 2004b). Studies which have attempted to address whether upgrading is 'good' for suppliers largely conclude that it does not necessarily lead to higher wage rates for workers (Bair, 2009, Raworth and Kidder, 2009, Rossi, 2013) and that local specific -factors play a more integral role in improving conditions for rural stakeholders such as collective organisation and institutional support (Bair and Gereffi, 2001, Carrillo, 1998, Czaban and Henderson, 2003). Ponte and Ewert (2009) in a study on South African wine note that after functional upgrading, farmers experienced higher risks and fewer rewards, even though in theory such upgrading should have had the opposite effect. These studies suggest that 'upgrading' as defined by Schmitz (2002) should not be considered as equivalent to 'a better deal' for farmers (Ponte and Ewert, 2009, Giuliani et al., 2005).

While there have been studies to address how economic upgrading shapes 'social upgrading' with regard to wage rates for workers, (Bair, 2009, Raworth and Kidder, 2009, Rossi, 2013), no known studies have been conducted that explores how governance shapes social capital. Within the context of the relationship between governance and social capital, there is a gap to explore whether upgrading can have positive and/or negative implications for social capital formation, or an absence of an implication at all.

2.5.5 Relationships and Trust as Mechanisms of Governance

Standards and upgrading play a dominant role in the GVC approach (Gereffi *et al.* 2005). However relationships and trust in GVCs have historically been overlooked as important mechanisms of governance (Riisgaard et al., 2010). Indeed shaping participation is not just about setting standards, but also the nature of the relationship and how buyers and suppliers interact (Bolwig *et al.* 2010).

How power is exercised in GVC relationships refers to the extent that a fair distribution of rents and risk is distributed along the GVC, with particular interest on the impact on the rural poor (Kaplinsky, 2004b, Riisgaard et al., 2010, Lee et al., 2011, Gwynne, 2008, Frederick and Gereffi, 2009). The 'closeness' of these relationships also becomes an important component of GVC

governance. In arms-length, market based governing relationships, the buyer and suppliers do not need to develop close, long-term relationships because the product is easily standardized and switching costs are low. However, where the product is more complex and switching costs are higher, there is a necessity for stronger, long-term relationships between actors that match the complexity of the chain (Hornibrook et al., 2009, Schmitz, 2005). Repetition of transactions also reflects the relationship between actors such that, as more and more transactions take place, there is a higher likelihood that relationships between actors will be more trusting (Frederick and Gereffi, 2009).

Riisgaard *et al.* (2010) argues that too much of the GVC literature downplays the role that power asymmetry has when suppliers deal with buyers, even though Gereffi's (1994) definition of governance explicitly refers to power relations and how they determine the allocation of resources and rewards. While the strength of the GVC framework is in its ability to describe and typologize structures of governance in GVCs, this is at the expense of the power relationships between actors and the way buyers use their power in the chain.

Closely related to the concept of relationships is the role of trust between buyers and suppliers. Trust is referred to as the extent to which one believes that others will not act to exploit their vulnerabilities (Morrow et al., 2004, Kaplinsky and Morris, 2002). Trust is pertinent to the question of governance because, as Dekker (2003) notes, trust in others' goodwill serves as an informal control mechanism for the chain. This dimension of a GVC parallels the importance of relationships in rural clusters in that it reduces transaction costs between actors and therefore should be included when analysing linkages with buyers (Vieira and Traill, 2008). It also mirrors the social capital concept that is so prevalent in the previously discussed territorial model for rural development. As Kaplinsky and Morris (2002) state: "an understanding of the nature and importance of trust in inter-firm relationships within the value chain requires economists to also engage with the contingency and sociology of the determinants of social capital" (p. 48). However trust within the context of GVC governance is a vertical concept; meaning the linkages between actors with different functions, rather than one which relates to the locality of producers which is more common with social capital (Humphrey and Schmitz, 2002).

In a high-trust GVC, the buyer gains legitimacy from suppliers in the chain and relationships become more sustainable, as opposed to a low trust GVC where turnover and exclusion of suppliers is high and short-term price advantages become the driving force for the chain (Sako

and Helper, 1998, Kaplinsky and Morris, 2002, Riisgaard et al., 2010). A more equitable share of rewards along the GVC is more likely when there is a higher level of trust between actors (Kula et al., 2006), although the direction of causality is difficult to determine and may be interdependent. Relationships that go beyond operating at arms-length and transactional are also more likely to induce learning (making better products and making them more efficiently) by suppliers from buyers (Zanfei and Saliola, 2009, Pietrobelli and Rabellotti, 2011). If there is a simple product that requires very little exchange of information between actors, then it would be expected that trust does not play an important role in how the GVC is governed. Likewise if the product is complex and requires a high degree of information exchange, then trust is more important to the functioning of the GVC.

The literature makes the case that building trust is a long term process and therefore long term relationships become a facilitator for high levels of trust. Buyers are more likely to assist in learning processes if relationships with suppliers are long term and there is a high degree of trust, since the propensity of suppliers to switch (thereby using learnt capacities from one buyer with another) diminishes. The role of vertical trust (between actors of different segments, such as producers and processes) in GVCs is noted extensively in terms of its role as a governance mechanism (Neilson, 2008, Sturgeon, 2002, Wiegratz, 2008, Wiegratz et al., 2007, Lee et al., 2011).

The following section begins with a discussion of the definitional and conceptual issues surrounding social capital and collective action more broadly. It then goes on to outline the main benefits of social capital for ID, from agricultural productivity to farmer incomes. The section finishes by identifying existing factors that influence social capital formation and concluding with how governance maybe a factor that deserves further exploration.

2.6 Research Agenda: Bringing Together Social Capital and Governance in GVCs

According to the GVC literature, the economic rents that actors are able to acquire in a value chain depend in part on the governance of the chain; meaning the mechanisms by which buyers shape the participation of farmers. Governance of GVCs is especially relevant to developing countries because: 1) governance is most explicit when buyers source from developing country producers (Humphrey and Schmitz, 2004); 2) the scope for countries and regions to thrive depends in large part on their participation in GVCs (Lee et al., 2011, Gereffi and Lee, 2012,

Kaplinsky and Morris, 2002); and 3) there is evidence that suggests smallholder farmers in developing countries only have access to export markets if they are able to integrate into GVCs that are governed by buyers (Dolan and Humphrey, 2000).

Governance has become an ever more important concept in the literature (Gereffi and Lee, 2012) and a rich account now exists on how it affects the ability of suppliers to develop their capabilities to make better products, to make them more efficiently and to move into different functions of the chain (Bazan and Navas- Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007). Yet this paradigm has not been applied to relationships between farmers on the ground and there are calls in the development literature to combine this framework with conditions at the rural rather than just the value chain level (Challies, 2008, Fold and Gough, 2008, Bolwig et al., 2010, Neilson, 2008, Messner, 2004).

A range of different factors that influences social capital formation has been studied in the literature. However there is still a poor understanding of how social capital develops when integrated into GVCs. Compared to the benefits of social capital which has been focused on extensively in the literature; how social capital is formed has been paid relatively less attention (Staber, 2007, Durlauf, 2002, Durlauf and Fafchamps, 2005, Miguel et al., 2006). The development literature has typically ignored the idea that the social capital of farmers is built or destroyed within the enabling and constraining environment of GVCs, opting instead to focus on factors which are exogenous to value chains and endogenous to groups (Coleman, 1990, Lyon, 2000, Becker and Ostrom, 1995, Ostrom, 1992). Where discussions on the role of buyers have taken place, there has been a general sense of pessimism (Messner, 2004, Bingen et al., 2003, Rabellotti, 2004). Yet there have been limited attempts to effectively explore the relationship between how buyers govern farmers in GVCs and social capital, thereby warranting an in-depth study to address this gap in the literature. On a fundamental level, the argument for this combination of the horizontal construct of social capital with the vertical construct of governance boils down to a simple observation: farmers do not just operate in isolated groups and they do not exclusively operate in GVCs – they operate in both, at the same time.

As the review showed, there are different aspects that constitute governance, and social capital has two distinctions; cognitive and structure. Placed within a study context where governance and an existing stock of social capital are evident, and with a methodology that purposely looks

at these two concepts within a single study, this thesis may uncover a relationship that is absent from the present literature. The research question is as follows:

How does the Governance of a Global Value Chain shape the formation of social capital among farmers?

There are no known empirical studies in the literature which specifically addresses how governance, as an enabling or constraining structure, shapes social capital formation among farmers. This is despite calls in the literature for more focus on how governance impacts the immediate environments that farmers operate in (Challies, 2008, Fold and Gough, 2008, Bolwig et al., 2010, Neilson, 2008, Messner, 2004) and a consensus that more needs to be done to develop a framework for social capital formation (Staber, 2007, Durlauf, 2002, Durlauf and Fafchamps, 2005, Miguel et al., 2006). The next chapter lays out the conceptual framework to answer the above research question.

3 Conceptual Framework

3.1 Introduction

This chapter proposes the conceptual framework and propositions that have emerged from the literature review. How social capital forms within the parameters set by governed GVCs has been identified as an area that has received inadequate attention in the development literature. The over-arching research question that this thesis seeks to address is:

How does the Governance of a Global Value Chain shape the formation of social capital among farmers?

The literature review revealed a number of key concepts that warrant further investigation as part of this research. These concepts are presented in a framework that seeks to capture the relationships between the governance of GVCs, and dimensions of social capital (figure 3).

Although some factors influencing social capital are known in the literature, there is less known about how social capital is formed within the context of a GVC. The conceptual framework here adopts concepts from the existing social capital literature while also introducing a new concept to explore; governance. This differentiates the conceptual framework because it recognises that the social capital of farmers function in governed GVCs, whereas the previous social capital literature has not taken this into account. The next section begins the discussion on the conceptual framework by 'unpacking' the concept of governance in relation to the literature.

3.2 Social Capital Framework

This section brings together the latest thinking on social capital formation in the literature. An aspect in which the framework presented here differs from much of the previous social capital literature is that it separates social capital into two distinct dimensions; structural and cognitive social capital. This goes some way in clarifying the concept which, as discussed in the previous chapter, has been the main criticism of social capital (Pender et al., 2012).



Figure 3: Conceptual framework

Robert Putnam defines social capital as the "features of social organisation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit" (1995, p. 67). The present research narrows down the definition of social capital by following the conceptual distinction between structural and cognitive social capital as laid out by Uphoff and Wijayaratna (2000). Structural social capital comprises the roles for decision making, rules, procedures and precedents that supports mutually beneficial collective action, making it easier to resolve conflicts, reducing transaction costs, facilitate information flow and enabling social learning through a formal structure. Cognitive social capital is the norms, values, attitudes and beliefs that incline people to cooperate based on their inclination to trust one another.

A range of factors that influence social capital formation were identified from the literature review. Enforceable rules and sanctions were highlighted as one important influencer, rooted in the New Institutional Economics strain in the literature (North, 1990). Rules enable social capital

formation because they constrain individualistic behaviour that is destructive to the group (Becker and Ostrom, 1995, Coleman, 1990, Pretty and Ward, 2001). Sanctions on opportunistic behaviour must be also be enforceable, especially where the rewards for cheating are high (Molinas, 1998, Woolcock, 1998) and these sanctions can be reputational and exclusionary, not just monetary in nature (Nooteboom, 2007). However, enforceable rules can also be a barrier to social capital formation where rules are seen as too restrictive by group members (Fulton and Giannakas, 2001, Nilsson et al., 2012). Associated with enforceable rules and sanctions is the role of leadership. It is generally agreed that strong leadership, that guides a group towards a collective goal, is an important factor in social capital formation (Serra, 2011, Vollan, 2012, Goetz and Rupasingha, 2006, Krishna, 2004, Kaganzi et al., 2009), although leadership is embedded within the wider concept of social capital and is therefore not necessarily seen as a distinct concept that enables it (Uphoff and Wijayaratna, 2000).

Diversity (i.e. the qualitative differences among group members) is also a factor in social capital formation. In the development literature, this is typically related to ethnic or religious diversity, making the argument that the larger the differences between people, the less cohesion there will be between them (Woolcock, 1998, Beard, 2007, Klitgaard and Fedderke, 1995, Easterly and Levine, 1997, Castle, 1998, Huffman and Feridhanusetyawan, 2007, Mavridis, 2015). In this regard, ethnic and religious diversity is a barrier to social capital formation given that there is relatively little opposing evidence in the literature (Bhattacharyya et al., 2004). Following from ethnic and religious diversity is culture and historical factors. These are broadly understood to be an important influences of social capital formation both as an enabler and a barrier (Nilsson et al., 2012, Molyneux, 2002) since social capital is deeply embedded in a cultural and historical context (Uphoff and Wijayaratna, 2000).

It was also highlighted in the literature review that time and maturity are elements to consider. There is less agreement on how important these factors are. There exists a divide between those who imply that social capital can be built within a short period of time (Grootaert and van Bastelaer, 2002, Kaganzi et al., 2009), thereby ultimately suggesting that time is not a significant factor, against other accounts that indicate due to its cultural and historical embeddedness, social capital cannot be created in the space of a few years (Maclean, 2010, Woolcock, 1998, Lyon, 2000). Linking with this latter view is also the role of group maturity (Barham and Chitemi, 2009). Despite the conflict over the significance of time and group maturity among scholars, the wide discussion of the constructs in the literature justifies inclusion in the conceptual model.

The role of the state and institutional organisations is also a factor. Some authors see a complimentary role for the state (Hayami, 2009, Barham and Chitemi, 2009, Petro, 2001, Serra, 2011, Narayan and Pritchett, 1999) within the context of a New Institutional Economics perspective (North, 1990). Institutions can guide the development of social capital through rules that foster trust among farmers, sharing a similar conceptual role to rules and sanctions. Likewise the role of institutional organisations such as NGOs and development agencies is also cited as an important element in social capital formation of farmers because of the material support they provide that facilitates trust among farmers (Khwaja, 2009, Grootaert and Narayan, 2004, Janssens, 2010, Vasilaky, 2013). Within the institutional context there is a distinction made between institutions; the 'invisible hand' that provides general rules and incentives that guide behaviour such as ADP, and institutional organisations; institutions that are 'made' and have particular roles and responsibilities, such as donor agencies (Uphoff, 1993). The institutional context is sometimes considered to be a barrier to social capital, reflecting the endogenous view of social capital formation (Coleman, 1990, Lyon, 2000). The institutional context around the GVC can be an enabler or a barrier in a conceptual framework for social capital formation. As a result, it is an important factor to consider.

The final construct in the conceptual framework is the principal focus of the present research. While there has been no apt exploration of governance and social capital formation, discussions in the literature allude to a negative association (Messner, 2004, Bingen et al., 2003, Rabellotti, 2004). Based on the discussion in the literature review, the present research argues that there could be a link between these two concepts because social capital among farmers operates within the enabling or constraining environment of GVCs governed by buyers. Governance has thus far not effectively entered the discourse on social capital theory. In line with the research question, the conceptual framework incorporates and consequently investigates governance as a concept into an overall theoretical model for social capital formation.

A range of factors have been identified from the literature that influences social capital formation; rules and sanctioning, group diversity, culture/history, time/maturity and institutional context. Furthermore, governance is a concept that has not been discussed in the social capital literature within the GVC context. The following section brings together the governance framework with the social capital framework to include governance as a potential influencing factor.

3.3 Introducing Governance into the Social Capital Framework

The first step in bringing governance into a social capital framework is to break it down into its various components and dimensions. Schmitz (2005) suggests 'unpacking' governance before analysing it, since the definition of governance might be straightforward but the definitional components are not.

Humphrey and Schmitz (2004) define governance as the notion that "some firms in the chain set and/or enforce parameters under which others in the chain operate" (p. 96). Buyers in GVCs are the source of authority and the enforcer of contractual rules, that drive the allocation of resources and coordinate the activities of partners along the chain (Pietrobelli and Rabellotti, 2011). These rules are reflected in the use of product (what), process (how), and scheduling (how much and when) standards (Humphrey and Schmitz, 2004).

Information flow is also identified in the literature as a component of governance (Humphrey and Schmitz, 2004). The nature of information flow between buyers and suppliers shapes participation in the GVC. If information is unimportant to the functioning of the chain and is simple and easy to codify, then this would lean towards a low level of governance needed in the chain resonating with an arms-length spot market but if the opposite is true and information is important, complex and typically done face-to-face, then it suggests more explicit governance (Humphrey and Schmitz, 2004).

Risk of supplier failure is a dimension of governance because if suppliers are unable to meet their obligations, then the propensity for buyers to intervene in their suppliers' affairs increases – especially where strict standards are prevalent (Gereffi et al., 2005). This intervention can come in the form of 'upgrading', defined as the acquisition of capabilities to access new markets for suppliers (Humphrey and Schmitz, 2004). It is widely stated in the GVC literature that upgrading is facilitated in governed GVCs, but less so in spot-markets where governance is absent (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007).

Relationships along the chain and the level of trust between actors are also components of GVC governance (Bolwig et al., 2010, Riisgaard et al., 2010, Vieira and Traill, 2008, Wiegratz, 2008, Wiegratz et al., 2007). These two constructs relate to the dynamics of participation in the chain (i.e. *how* agri-chain actors participate). This includes the way rewards and risks are distributed

along the GVC (Kaplinsky, 2004b, Gereffi and Lee, 2012), the extent that the voices of less powerful (often upstream) actors are listened to and whether buyers create a 'win-win' environment for themselves and farmers (Frederick and Gereffi, 2009). Given that relationships and trust is in most part overlooked in the original GVC framework (Riisgaard et al., 2010), even though governance not just describes but actively shapes the participation of agri-chain actors in GVCs (Gereffi and Lee, 2012, Frederick and Gereffi, 2009), the present research includes these to be additional dimensions of governance.

A range of concepts that make up governance emerge from the literature: standards, information flow, risk of supplier failure, strength of relationships and trust. Exploring the relationship between these constructs of governance, and structural and cognitive social capital, is how the thesis will approach the research question.

3.4 Bringing Together Governance and Social Capital into a Unified Conceptual Framework

The purpose of the above discussion was to: 1) highlight existing concepts that may inform social capital formation as to examine these in the case studies; and 2) 'unpack' governance as a concept and propose an exploration of the relationship with social capital. As is suggested by Bolwig *et* al. (2010), the vertical aspects of governance is combined with the horizontal aspect of social capital such that governance becomes part of the wider social capital conceptual framework.

The unified conceptual framework sets the basis for how the research question is approached. Governance may or may not have a role in shaping structural and/or cognitive social capital but if it does, then it may have an enabling or constraining role. Existing concepts identified in the literature as factors important in shaping social capital will also be explored as they may provide some explanatory value in understanding how governance shapes social capital, given that the relationship between governance and social capital, if indeed a relationship does exist, will likely to be complex and multi-faceted.

Based on the overarching research question and the discussion of how the conceptual framework will guide the research, a set of resulting propositions are explored to frame how the research question is approached:

P1: Governance of a Global Value Chain has a role in structural social capital formation among farmers

- a. Governance has an enabling role in structural social capital formation
- b. Governance has a constraining role in structural social capital formation
- c. Governance has a negligible role in structural social capital formation

P2: Governance of a Global Value Chain has a role in cognitive social capital formation among farmers

- a. Governance has an enabling role in cognitive social capital formation
- b. Governance has a constraining role in cognitive social capital formation
- c. Governance has a negligible role in cognitive social capital formation

These propositions focus entirely on the relationship between governance and social capital. However as mentioned; given the exploratory, theory building purpose of the research, other factors included in the conceptual framework may have a role in this relationship and therefore will also be explored in relation to the propositions.

Without pre-judging the findings, there are some indications in the literature on what an interaction between governance and social capital may look like. It is well understood in the governance literature that there is a high propensity for buyers to intervene and provide support to suppliers when they perceive there is a risk of supplier failure (Gereffi *et al.* 2005). One dimension that could represent an interaction between governance and social capital is the role of buyer support and upgrading – the process of producing better, more efficient or new products or services. Given other types of capital are involved in this process, whether that is financial, physical or knowledge-based; and social capital facilitates the adoption of standards (Asfaw *et al.* 2009), there could be an enabling role of buyer support in the formation of social capital. In particular, there may be a strong impact on structural social capital, since there are conceptual similarities from an institutional point of view between standard setting, and internal rules and regulations.

The role of standard setting could be a dimension of governance that has important consequences for social capital. As Poole and de Frece (2010) note, intensifying requirements on collective organisations come with new 'rules of the game' that necessitate more control. However, as a number of scholars note, greater control can lead to negative sentiment among farmers (Nilsson *et al.* 2012, Cechin et al., 2013). It suggests that new and demanding standards imposed on collective organisations could have a constraining role in cognitive social capital formation if that negative sentiment extends to linkages within a collective organisation.

As discussed, there could be different interactions between governance and structural social capital, and governance and cognitive social capital. Therefore, the interaction between governance and the two dimensions of social capital are studied separately. It is noted in the literature that structural and cognitive social capital are complimentary and reinforcing (Adhikari and Goldey, 2010, van Rijn et al., 2012). It is expected that without an increase in cognitive social capital, it is unlikely there will be an increase in structural social capital (and vice versa).

The next chapter moves on from identifying the concepts and propositions towards how these concepts are explored in the methodology.

4 Methodology

4.1 Introduction

This chapter describes the methodology adopted for this research, including philosophical considerations that set the foundations to the way the data collection is approached, the nature of the study, the research tools used to collect data and methodological issues such as validity and representation.

From the literature review, it was argued that there is an unexplored gap in the literature. While the benefits of social capital have been studied extensively, the factors that influence social capital have not, leading to the notion that there is a poor theoretical understanding of how social capital is formed (Staber, 2007). Furthermore, the interaction between governance and social capital has not been effectively addressed in the literature, despite the fact that farmers can operate in value chains *and* collective groups. The previous chapters laid out the principal research question and the resulting propositions:

1. How does the Governance of a Global Value Chain shape the formation of social capital among farmers?

P1: Governance of a Global Value Chain has a role in structural social capital formation among farmers

- a. Governance has an enabling role in structural social capital formation
- b. Governance has a constraining role in structural social capital formation
- c. Governance has a negligible role in structural social capital formation

P2: Governance of a Global Value Chain has a role in cognitive social capital formation among farmers

- a. Governance has an enabling role in cognitive social capital formation
- b. Governance has a constraining role in cognitive social capital formation
- c. Governance has a negligible role in cognitive social capital formation

The research seeks to be exploratory by nature; it does not seek to *conclude* the debate over the formation of social capital, but rather open the box and shed light on this issue to *contribute* towards this debate by identifying the formation of concepts that may inform a theoretical model for social capital in GVCs.

From a pragmatist epistemological position (Yin, 2009), the research problem presented is one that is better suited to a qualitative approach because it requires in-depth phenomenon to be addressed and the *formation of concepts* within a conceptual model (the formation of social capital), rather than one which aims to *test specific relationships between variables*, that is suited to a quantitative approach (Brady and Collier, 2004). Although it is generally understood that social capital and collective action is context specific (Velez et al., 2010, Cardenas and Ostrom, 2004, Cardenas et al., 2011, Henrich et al., 2010, Prediger et al., 2011, Serra, 2011), this does not mean that the context followed in the present research prevents the creation of a general conceptual framework that can be tested empirically in different contexts. As Peters and Waterman (1982) note, the objective of building a conceptual framework is to create a context that is 'loose' but establishes concepts that are 'tight'.

Carlile and Christensen (2005) put forward three different stages of theory building; observation, categorization and association (Figure 4). Observation refers to describing and measuring phenomena such that data is generated which can then be analysed. Categorization refers to organising these fragments of data (observations) into categories and putting the data into typologies based on particular attributes they possess. Association is where a relationship can be established between the category defining attributes and the observations.

In addition to the broader argument that qualitative research is best suited to theory building, Serra (2011) argues that the use of quantitative surveys and econometric models has missed the qualitative and context-dependent aspects of social capital; leading to a call for more rich, case study specific research. The nature of the study follows a qualitative case study orientated approach. Such an approach looks to keep the number of cases low and the number of variables high to make the exploration deeper and richer (Porta, 2008), thereby matching the concept building purpose of the research (governance and social capital). Furthermore, the issue of separating context from theory means that a case study approach better suits a model that is made up of concepts which cannot be easily generalized, particularly when dealing with issues that this thesis tackles.

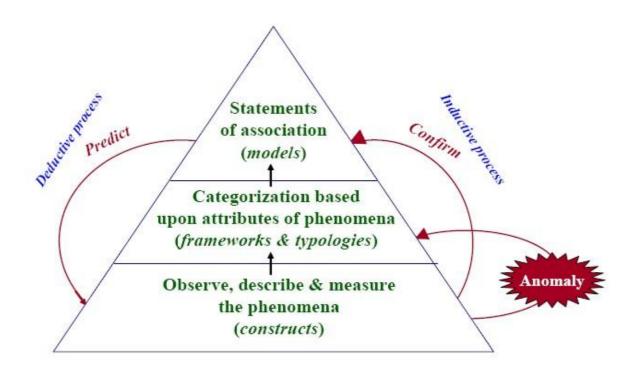


Figure 4: The process of theory building Source

Source: Carlile and Christensen (2005)

The chapter then describes how case studies were selected and the protocol that was followed to filter out cases that were inappropriate for the purposes of the research. Following a participatory research framework (Freire, 1970), the sources of data are laid out and the design strategy is described.

4.2 Nature of the Study

4.2.1 Philosophy

The ontological and epistemological approaches in development theory are very much split between development economics as an objectivist, empiricist position and development sociology which is more subjectivist and social constructionist. This has led Woolock (2009) to claim that the conflict in development studies is based more on a contrast in philosophy than methodology.

Within the context of *social network* research, to which this study is closely aligned (Granovetter, 1985, Granovetter, 1973), the research here ultimately seeks to map a social

environment and stands as post-objectivist; it is less extreme in its rejection of subjectivism than pure objectivism because it sees 'man' as an information processor rather than purely as a responder to a concrete structure of reality (Morgan and Smircich, 1980). This also reflects the direction of the research problem in that the phenomenon being studied is observable, as is the case of organisations, but also takes the form of social constructions in terms of social capital, in a sense mixing *more concrete* and *less concrete* objects of analysis (Yin, 2009). The philosophical approach taken here is also pragmatist in nature because it is the research question which dictates the approach rather than a single paradigm (Tashakkori and Teddlie, 1998). Combining the philosophical foundations and the qualitative methodological approach, the present research takes a post-positivist perspective where it is assumed the researcher represents the participants and their realities as an external authority and the ultimate aim is to collect findings, search for themes and treat analytical themes as objective (Charmaz, 2002).

4.2.2 Qualitative, Two-Case Study Approach

The gap identified in the literature review is one which is based on a poor conceptual understanding of the relationship between governance and social capital. The research is exploratory in nature because it is examining phenomena that cannot be easily simplified and its aim is to build constructs that describe a classification of these phenomena. These constructs can be used to inform a larger conceptual model for the development of farmers' social capital in GVCs, with the end goal of contributing to theory.

In light of the above research conditions, coupled with a philosophical approach which understands that methodology should be dictated by the research problem, a case study approach has been chosen. Case studies, or more specifically, heuristic case study models (George and Bennett, 2005) are primarily used by researchers to develop or generate theory, or identify specific causal processes (Bennett, 2004). Although case study approaches can be very diverse from one another, Schramm (1971) argues that the central tendency among them all is that they try to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result. Yin (2009) expands on this definition by exchanging 'decision' with 'organisation' or 'individuals'. It is asking the underlying questions of 'why' and 'how' a phenomenon happens that separates the case study approach from other research methods.

While case studies can be quantitatively driven (Yin, 2009), a purely qualitative approach was selected for this study for a number of reasons. Qualitative research tends to be inductive in that research informs theory rather than vice versa. This matches the nature of the study in that, as already stated, the contribution of the study is theory building rather than beginning with a hypothesis deduced from theory and then testing this hypothesis. It is argued that quantitative research cannot conceptualize processes that are as complex as people's lives (Cassell et al., 2005, Bryman, 2008), contrasting with qualitative research which aims to generate an in-depth, personal and situational examination of people's experiences (Charmaz, 2002). Indeed this is particularly relevant to the concept of governance:

"It is difficult to capture all of the governance and services issues in a fixed-format questionnaire. Most of the data needed for analyzing governance is of qualitative and un- quantifiable nature. For this reason it is recommended to use open-format and intensive interviews with value chain participants and key informants" (M4P, 2008: p. 49)

Given that social capital development is examined within the context of GVCs, the constructs associated with the GVC framework, with particular reference to governance which represents the defining concept of a GVC (Ponte, 2002), is studied and related back to social capital where relevant. However since the main aim is to build a theoretical model for social capital formation, the identification of other factors needs to be explored (George and Bennett, 2005). The development of new concepts that may not have been considered prior to carrying out the research is a natural strength of qualitative research since it encapsulates an element of reflexivity which rigid, quantitative methods are less able to do (Cassell et al., 2005). To achieve this goal, there is simultaneous data collection and analysis to pursue emerging themes throughout the research process. This strategy enables an integration of variables into a wider theoretical framework which highlights specific causes, conditions and consequences of the studied process (Charmaz, 2002).

Table 4 presents some common differences between quantitative and qualitative research. The research carried out here concerns itself with how people and organisations interact with each other and is exploratory in nature; therefore it is argued to be best suited to a qualitative design.

Table 4: Common differences between quantitative and qualitative research

Quantitative	Qualitative	
Numbers	Words	
Point of view of researcher	Points of view of participants	
Researcher is distant	Researcher is close	
Theory testing	Theory emergent	
Static	Process	
Structured	Unstructured	
Generalizations	Contextual understanding	
Hard data	Rich data	
Macro	Micro	
Behaviour	Meaning	
Artificial settings	Natural settings	

Source: Bryman (2008)

A two-case study design has been followed for a number of reasons. First of all, the case study selection process here does not seek to find an extreme or unique case to investigate because the research problem demands a grounded approach to theory building as opposed to investigating why one unique case does not fit a wider theoretical model; a common usage for single case study designs (George and Bennett, 2005). To avoid *selection bias* (Mahoney, 1999) i.e. a focus on cases where a relationship between social capital is evident a priori, the present research takes a selection process where cases are selected based on a general criteria rather than an extreme or unique case. Secondly, it is argued that evidence from more than a single case study is more robust (Herriott and Firestone, 1983) and that two case studies rather than one adds considerably more value (Yin, 2009). Thirdly, replication is considered an important element of the methodology here because, as an exploratory piece of research, a broader study of cases may bring a more in-depth understanding of the research problem.

To a limited extent, a two-case study model tackles some of the criticisms of qualitative research based on its poor ability to replicate studies (Bryman, 2008). It also opens up the opportunity to use a preceding case study to inform the subsequent case study which is considered an effective way to approach exploratory research (Yin, 2009). If case studies produce similar results, then

this will provide persuasive evidence on how social capital develops in governed GVCs. However, if case studies provide conflicting results from one case to the other, then this will present an opening to explore why this might be the case. This point refers to an important outcome of qualitative, case study research; the ability to show findings have case-to-case transferability, meaning that generalizations can be made from one case to a similar case (Yin, 2009). This is different to how we might conceive generalizations made in quantitative research that seeks to universalize findings beyond cases. Universalization of findings is not the main purpose for qualitative case study research; but rather thick description of individual cases that can be transferred to other cases with similar conditions.

A significant issue with designing qualitative research is that, unlike quantitative research where there is greater standardization of methods, there are no universal rules that govern how many cases, interviews, questions or participants should be followed (Kvale and Brinkmann, 2009). The present research takes a pragmatic approach of selecting two cases centred on making the most of available opportunities within the time frame available (Cassell et al., 2005). While more than two case studies would have enhanced case-to-case transferability (Yin, 2009), the quality and richness of the data collected allowed for a more in-depth and comprehensive view of each case study.

It must be again noted that the aim of the research is to contribute towards the theoretical debate over social capital formation, not to solve the debate in its entirety, since the gap in the literature demands exploration of this topic rather than a conclusion to it. With this in mind, the number of cases is driven by the desire to generate analytical themes rather than the production of empirical generalizations (Charmaz, 2002, Yin, 2009). The contribution of analytical generalizability is considered in completely different terms to statistical generalization, with the latter demanding large sample sizes. To regard each case as a method of enlarging the sample would be misguided; rather each case is conceptualized as an 'experiment' to generate analytical themes that contribute towards a wider theoretical model (Yin, 2009). It is determined here that two cases allows for a reasonable scope to replicate experiments that extract desired analytical themes which can then be generalized to the theoretical level.

In line with the various models of case study research proposed by Yin (2009), the present research follows a multiple case study approach embedded within the same national context of Peru. This allows for a controlled comparison of case studies with overlapping *macro-*

institutional contexts of the case study GVCs. It is argued that, where a specific aspect of a phenomenon is under study, a structured, focused comparison that standardizes methods between cases is best suited (George and Bennett, 2005).

While a structured method is important to compare and contrast cases, this does not suggest that emerging lines of enquiry should not be followed, as George and Bennett (2005) note:

"This is only to say – and to insist – that case researchers should follow a procedure of systematic data compilation... asking the same questions of each case does not prevent the case writer from addressing more specific aspects of the case or bring out idiosyncratic features of each case that may also be of interest for theory development or future research" (p. 86).

Case studies are represented as individual GVCs. To maximise the ability to compare and contrast cases, thereby driving towards a *theoretical replication* (Yin, 2009), two different agricultural product groups are explored; cacao and palm oil. Both of these product groups in Peru have a prevalence of powerful buyers and are positioned as high-value chains relative to other commodity products such as grains and cereals (FAO, 2011), the latter being a consideration given that these present greater opportunities for social capital to reduce transaction costs (Fischer and Qaim, 2012). A more detailed account of the selection protocol is presented later, however from the standpoint of the chosen case study type, it is believed that going beyond a single product will allow for the examination of nuanced differences between how GVCs are organised.

Case study research does not follow a specific protocol, rather it involves asking questions and responding to answers to identify convergent ideas and/or paradoxes. Yin (2009) proposes six primary sources of qualitative case study evidence: documentation, archival records, interviews, direct observations, participant-observation and physical artefacts, with an emphasis on combining methods rather than selecting just one. Interviews and documentation (secondary data) are the primary tools used to answer the research problem, although some limited observations will also be made where appropriate. According to Davies (2007), interviews are particularly well suited to: 1) gauge specific experiences from individuals; 2) case studies where the sample of participants is small; and 3) the desire to follow up on new issues that may emerge as the interview process progresses. All of these three strengths of interviews as a methodological tool match the needs of the research question in that it aims to unearth

participant experiences (e.g. trust, power asymmetries), will have a relatively small number of participants to extract data from and may, as a theory building piece of research, have to adapt as new issues emerge. Although there is a degree of construct measurement in the data collection which would typically suit a survey design, open-ended interviews are valuable in allowing participants to respond with greater richness and spontaneity (Oppenheim, 1992). Where appropriate, observations were also to be made and recorded as they have the ability to provide context behind the interviewing data (Bryman, 2008).

For the reasons laid out above, a collection of studies in the GVC and social capital literature follow qualitative interviews and secondary documentation as data collection methods (Tran et al., 2013, Giuliani et al., 2005, Contreras et al., 2012, Neilson, 2008, Vervisch et al., 2013, Khan and Khan, 2012, Vollan, 2012, Maclean, 2010, Lyon, 2000). Social capital is argued to be such a complex phenomenon that attempts to quantify it misses important underlying processes which influence its formation (Lyon, 2000, Serra, 2011). The present research is also concerned principally with understanding the barriers and enablers to the formation of social capital, which a survey design would not effectively address. As Grootaert and colleagues (2004) note in their methodology guide for measuring social capital for the World Bank: "It is likely that the process of creation (and destruction) of social capital will be understood better by means of a variety of qualitative in-depth studies." (p. 17).

This provides a strong justification for using qualitative interviews supplemented with secondary sources (documentation) and where appropriate observational notes, as the main data collection tools in this study. Outside of the formal structure of interviews, less formal conversations in social environments is also utilized which can be a valuable way to cross-check data while exploring issues in a relaxed environment (Tran et al., 2013). Given that the researcher will be embedded in the case study context, the role of informal conversations could be an important tool to utilise, especially where respondents are uncomfortable with the formality of a recorded interview.

There are two general approaches to carrying out exploratory interviews; unstructured and semi-structured interviews (Yin, 2009). In an unstructured interview the researcher typically has a number of prompts but no more, whereas a semi-structured interview has more specificity in the topics covered and interview guides are utilized to steer the conversation while still keeping a level of flexibility (Bryman, 2008). A semi-structured interview guide was used in this study.

Although the study is exploratory, there are particular concepts that are measured, so that an understanding of which factors impact on social capital can be effectively explored. If new issues arise, a semi-structured interview process will still allow for flexibility to change the direction of conversation while at the same time including enough structure to effectively measure the constructs in the research:

"The interviewer would usually use a standardised interview schedule with set questions which will be asked of all respondents. The questions tend to be asked in a similar order and format to make a form of comparison between answers possible. However, there is also scope for pursuing and probing for novel, relevant information, through additional questions often noted as prompts on the schedule. The interviewer frequently has to formulate impromptu questions in order to follow up leads that emerge during the interview." (ESDS, 2011).

One of the principal arguments against qualitative research is its subjectivity. As the argument goes, qualitative research relies too heavily on the researcher's disorderly views about what counts as significant or insignificant (Bryman, 2008). Qualitative research is sometimes considered to be unscientific because it does not follow the strict methodological processes associated with quantitative research (Cassell et al., 2005). In recognition of this criticism, the research methodology adopted for this study takes seriously the methodological principles of validity, reliability, participant sampling and generalizability and addresses how the methodology incorporates this into a rigorous framework. These issues are subsequently discussed below.

4.2.3 Validity and Reliability

Validity and reliability are two crucial concepts to take into account when carrying out any research. Validity is associated with connecting concepts with measurements. Qualitative research is sometimes considered to have less validity and reliability in its findings because of the way quantitative analysis is seen as more 'scientific', thereby creating a hierarchy with quantitative research at the top and quantitative research below because of the subjective nature attached to the qualitative area (Hesse-Biber and Leavy, 2006). In qualitative research, it is important to acknowledge the role of the researcher and the potential for bias.

While qualitative research is subject to greater interpretation, Kvale (1996) argues that validity is achieved when the researcher can successfully argue that all other interpretations are invalid. According to Kvale, if the researcher is able to justify why their particular interpretation of the data is correct, then they may claim that the research has been validated. While the argument continues over which tools constitute a valid outcome, the qualitative research carried out here asked two important questions on validity: does the method capture what it is meant to; and is there a match between the method and the social reality, from the perspective of participants? A discussion on the interview guide design is in section 4.3.2.

One way of validating qualitative research in case study research is to check data using *negative case analysis* (Hesse-Biber and Leavy, 2006). This is where, when a key relationship has emerged in the findings, negative instances in the data should be sought. Since the research here is very much concerned with construct building, analysing negative cases provides an ability to validate theoretical claims that could otherwise just be reinforced in the data if only positive cases are found. The aim is to fit the data within the conceptual framework and if it does not, then to explain why (Kvale, 1996). The analysis of the data in the present study incorporates the negative case analysis approach by presenting not just findings that confirm the researcher's argument, but also noting the instances where the interpretation may differ.

With regard to reliability, Neuman (2003) separates two categories; internal reliability and external reliability. Internal reliability is where data and theory development is consistent with each other in a way where a picture can be created. LeCompte and Goetz (1982) argue that qualitative research is especially strong when tested for internal reliability because the in-depth and lengthy participation of the researcher allows for more linkages between data and theory to be made. For the research carried out here, particular reference will be made throughout the data collection to link the data back to concepts. External reliability is where data is cross-checked with other data such that the researcher looks for other evidence that could support or conflict with the findings. This is difficult for qualitative research because of the way small-N nature of case study and small sample research. External reliability is associated with generalizability (Yin, 2009). Gay and Airasian (2003) provide a checklist for evaluating reliability in qualitative research, some of which are outlined here:

• Is the researcher's relationship with the subject and setting fully described?

- Is all documentation comprehensive and detailed?
- Are key informants fully described, including their background and relationship with the group?
- Are sampling techniques fully documented?

As can be gathered, reliability is in large part about documenting how the research procedure has taken place (Yin, 2009). This allows for other researchers to replicate the procedure such that the results can be confirmed. The researcher is essentially providing a map from when the data was collected to the findings, as Yin (2009) notes: "the general way of approaching the reliability problem is to make as many steps as operational as possible and to conduct research as if someone were always looking over your shoulder" (p. 45). In a similar fashion, Bryman (2008) refers to 'dependability' of qualitative research. Researchers should follow an auditing approach where complete records of all phases of the research are kept, including problem formulation, case study selection, transcripts and data analysis. The thesis will therefore take this problem of reliability/dependability seriously by keeping records all the processes associated with carrying out qualitative, case study research.

4.2.4 Sampling and Generalizability

As already noted, the aim of qualitative research is to get an in-depth understanding of a problem. The technique followed here is purposive sampling (Patton, 2002). Purposive sampling is where participants are chosen based on the research question and the resources available. In the context of the research here, participants are specifically those that are associated with the GVC under study because they will be the most productive sample in terms of answering the research question Moreover, these are the 'subjects' in the participatory approach to development research (Freire, 1970). Although not always explicitly stated, the purposive sampling strategy has been used for data collection in the GVC literature (Tran et al., 2013, Giuliani et al., 2005, Contreras et al., 2012, Neilson, 2008). Key informants, typically project sponsors or gatekeepers, are also a good source of information in that they can direct the research towards the most relevant sources of information that may not be accessible when relying on 'regular' informants (Bryman, 2008). The research here uses a project sponsor – a research centre, to access appropriate stakeholders and gain a broad understanding of the research context.

Qualitative research lends itself to small samples where a given process can be investigated that contributes to theory, rather than making universal generalizations from findings. However even though it is typical for the sample size to be small, it should be sufficient such that valid inferences can be made about the population (Marshall, 1996). As Oppenheim (1992) notes, while the sample is not meant to reflect the exact representation that mirrors quantitative methods, a judgement sample is necessary which covers diversity of background in case this leads to a divergence in views and opinions within the population.

A criticism of qualitative, case study research is that it offers a poor foundation for generalizing findings beyond the cases under analysis. However, this is typically because such critics attempt to compare the approach with survey research (Yin, 2009). Survey research looks for statistical generalizations whereas case studies are geared towards analytical generalizations, meaning that we are looking to generalize results to theory building as opposed to building the empirics of a subject. The aim of analytical generalization is to show how selected cases fit with theoretical constructs. Marshall (1996) notes the argument against small sample qualitative research fails to understand that the aim is to choose a sample size that adequately answers the research question, rather than generalizing the findings in the same way as quantitative methods seek to do so. Since the research problem is one that is associated with concept formation in a theoretical model, generalizing at the analytical level by using case studies to organise concepts is best suited to the research. Another problem, although difficult to negate against, is that there might be particular cultural "taboos" which inhibit the truthfulness of answers that participants provide during interviews. This is particularly pertinent to the present research given that it is set in a developing country context where the culture of the researcher may not correspond with that of the environment. This is a problem which cannot be necessarily solved, but can at least be recognised as a weakness of qualitative research (or even selfreported quantitative research) in different cultural contexts.

4.2.5 Ethical Issues

To meet ethical considerations, all participants were informed of the general topic for research prior to interviews, without inferring the specific nature as not to influence answers, and asked for their consent. Consent was tape recorded as part of the wider interview. Confidentiality of answers was also conveyed to participants. In the present thesis, unless otherwise agreed to, the original name of individuals, organisations or institutions are not reported and are instead replaced with pseudonyms. Since tape-recording is used throughout interviews to record

responses, it is important for respondents to be informed that the conversation will be recorded using a dictaphone (Oppenheim, 1992). Consent was recorded at the beginning of each formal interview rather than asking participants to sign a consent form because it was felt that the latter could scare some from taking part in the research. All participants were advised prior to data collection that informal conversations may be analysed and used in the findings.

4.3 Research Method

4.3.1 Sources of Data

There are a number of sources of data available to case study research. The sources of data must reflect the specific research questions and the unit of analysis that these questions pertain to (Yin, 2009). The present research was based on the view of three types of stakeholder:

- Stakeholders who participate in the cacao GVC, from two collective farmer organisations who supply cacao to an exporter, who then sells the beans to its parent company, an importer;
- Stakeholders who participate in the palm oil GVC, from a producer group to its vertically integrated buyer; and
- Key informants who have a close view of the GVC, from research consultants to the Chairman of a Palm Oil Stakeholder committee.

The present research took a pragmatic approach to selection where the advice of key informants is highly valued because of the privileged position they have in gaining access to participants. The general advice that: "to get access often you have to be opportunistic." (Cassell et al. 2005, p. 29), seems even more relevant granted that the research is taking place in an isolated rural region within a developing country where access could be an inhibiting issue. To begin with a list of institutional actors in the research design ultimately comes second to the ability to access these actors and therefore the *gatekeepers* (Bryman, 2008), in this case a research centre, which is itself an institutional actor, played an important role in engaging participants for the research.

While access is critical, there also needs to be an awareness of selection bias, particularly if there is a tendency for the sponsor to direct selection towards participants that were not typical of the wider case study. Two measures were taken to avoid this potential problem. Firstly, it was

established from the beginning that the sponsor was also interested in avoiding this issue for their own research purposes with regard to research publication. Secondly, although this key informant facilitated access at the start of the data collection process, snowballing and free find sampling techniques, where participants would recommend other potential participants or the researcher would explore villages for new participants, were undertaken. This latter strategy also mitigated against participants being 'hand-picked' by collective organisations, avoiding the risk of being fed a particular narrative.

An important distinction to make that causes confusion in case study research is that the unit of analysis are organisations and not individuals, even though the unit of data collection are individuals within those organisations (Yin, 2009). This distinction means that we are asking individuals about how an organisation operates and why it operates in that particular way, as opposed to asking about individuals' behaviour or organisational outcomes only. As already discussed, a purposive sampling technique is followed up such that individuals who know how the organisation works and why it works in a particular way will be viable data collection sources.

The methodology utilized here is in line with a participatory research approach to data collection in development studies which treats the people and organisations on the ground as the arbiters of information on the environments and conditions that they live in (Freire, 1970). The participatory approach has received increased attention in recent years as a response to the top-down approach to data collection that ignores the views of precisely the people who are the subject of the research (Mohan, 2002). The theoretical underpinning advocated as a result of the literature review puts the rural environment as the dynamic force behind rural development. The data collection here begins with the premise that an investigation into a topic within the rural development subject area should include the perspectives of rural, agri-chain actors because they are the subjects of governance. Buyers, who are almost always the lead firm in a GVC (Gibbon and Ponte, 2005, Gereffi and Lee, 2012, Reardon and Farina, 2002) were also interviewed.

Subjects of interviews are not dogmatically restricted to the participants identified above since it is typical for agri-chain rural development research to snowball where more interviewees become available as data collection progresses and rural participants who were not considered at the beginning are then included in the final data set. It is especially common in research on

rural clusters to have a wide variety of local participants to generate a fuller picture of phenomena on the ground, for instance Hatanaka's (2010) study on institutions in the Indonesian shrimp chain includes key informant information from university specialists and local NGOs on top of field interviews with rural, agri-chain actors. Key informant information and a potential expansion of the participants under analysis are likely to be followed as the research progresses, thereby matching a 'purposive sampling technique' (Marshall, 1996) because the criteria for participant selection is based entirely on the notion that they will have knowledge that gives answers to the research question. Snowballing is a common strategy in qualitative research, particularly where access to stakeholders is an issue (Cassell et al., 2005).

In addition to GVC participants and key information, secondary data was also collected as a source of information. In particular, secondary data was collected to understand the macro-institutional context surrounding Peru's cacao and palm oil industry, including modernization initiatives and trade regulations set by national government or international organisations (Gereffi and Fernandez-Stark, 2011). This is important as the context is likely to have consequences on participation for rural, agri-chain actors (Bolwig et al., 2010). Secondary data on the global and macro-institutional context was available in the academic and grey literature.

4.3.2 Interview Guide Design and Data Collection

Before creating an interview guide, Weiss (1994) suggests first laying out a substantive framework for qualitative research. This helps prepare "different lines of enquiry" for the main interview guide to build on (Hesse-Biber and Leavy, 2006). The topics laid out are derived from the topics identified in the literature review and conceptual framework. An interesting point put forward by Yin (2009) is that the general orientation of questions are posed to the researcher and not the interviewee, differing from the way survey instruments are constructed.

While interview guides differed between stakeholder types: buyers, collective organisation management stakeholders and farmers; the structure of interview guides shared key elements. Table 5 lays out the lines of enquiry followed across interview guides and where appropriate, changes of time were probed as to understand how phenomena changed over time. Key informants were interviewed following a largely unstructured approach as they were useful in gathering contextual information or validating emergent accounts. The methodological work generated by Gereffi and Fernandez-Stark (2011), Bolwig and colleagues (2010) and the UK

Department for International Development (M4P, 2008) was used here to aid in developing the interview guide.

Table 5: Lines of enquiry in interview guides

Theme	Lines of Enquiry				
Background and context	 Basic information on participant and organisation, including: history, size, nature of operations (from sourcing to selling) and management structure. Plans over the next five years, both at the farm and organisational (collective and buyer) level. Perceived threats and opportunities in the future. Mapping the GVC by identifying the flow of materials from farmers to buyers. 				
Governance	 Contractual relationship with and standards placed on collective organisations. Problems trying to enforce standards and weaknesses in supplier capabilities. How standards requirements and information communicated to collective organisations/farmers (e.g. face-to-face, telephone, documentation) and why. Extent that method of communication and quantity of information meets needs of buyer and collective organisation. Changes over past five years. Strongest and weakest collective organisation as perceived by the buyer. Support and investment mechanisms for collective organisations, prompting for technical support and social organisational support (relating to social capital). Institutional support compared to buyer support. Changes over past five years. Number of collective organisations cacao/palm fruit buyer sources from and vice versa. Why these particular buyers/suppliers and not others. Changes over past five years. Length of relationship between buyer and supplier and reasons for short/long relationships. Extent of cooperation with regard to planning for the future and conflict resolution. Consequences if collective organisations switched to a different buyer and vice versa. Nature of relationship between farmers/management of collective organisations and buyers – what works well and would not work well. 				
Social Capital	 Story behind initial creation of collective organisation. How and why farmers joined collective organisation, prompting for barriers to joining. Changes in associational membership. Benefits to farmers of being in collective organisation and what benefits are missing but would be desirable. Understanding of collective organisations' internal workings, from rules and procedures to trust in leadership/other members. Changes over past five years. Extent to which members trust one another and the leadership of collective organisations. Level of participation, such as organisational meetings and workshops. Extent of trust and cooperation among farmers in villages and with farmers from other villages, probing for benefits of cooperation at the village level. 				

Riessman (2004) suggests that, for narrative analysis, it is essential to ask follow up questions even when it appears the questions have been answered. For example, there may be specific stories that emerge from participants that illustrate how governance may have shaped social capital that require further questioning. Since the research method is thematic, the suggestion by Riessman is even more pertinent. George and Bennett (2005) note that a key part of qualitative, exploratory research is to always look for the link between concepts which require in-depth questioning that goes beyond the initial interview questions. This is a

strategy followed in the research design where although the questions are closely followed, when a theme worthy of further investigation arises, the interviewer diverges from the guide to delve deeper.

McNamara (2009) offers five general recommendations for effective interview questions in qualitative research: 1) wording should be open ended; 2) questions should be as neutral as possible; 3) questions should be asked one at a time; 4) there should be clear wording of the questions, particularly for different cultural contexts; and 5) make "why" questions as open as possible to avoid a loaded case-effect relationship. With exception to point 3 which is procedural, each point informs how the interview guide was constructed. Questions were as open-ended as possible and purposely avoided any leading inferences, with a focus on avoiding any technical language. Finally, although "why" was consistently asked in the interview guide to understand motives and justifications to answers, there is no presumption for what potential concept or cause the "why" attains to; this is left to the participant to convey and describe. These measures were taken to address concerns over bias as previously laid out.

In the introduction and at the end, 'factsheet information' was recorded (name, age, position in the company, number of years employed) so that people's responses could be contextualized (Bryman, 2008). The introduction section also allowed for the broad topic of the interview to be introduced to participants, as recommended by Kvale (1996).

To set the unit of analysis, the flow and structure of the chain entails a mapping process; an exercise in the GVC framework known as the value chain's 'input-output' structure (Gereffi, 1994). This sets a descriptive foundation for the rest of the analysis in terms of understanding what inputs move downstream through the chain and which stakeholders along the chain are responsible for what activity. Without this knowledge, it is difficult to derive meaning from governance since we would not know what and who was being governed. To map the input-output structure, relevant participants were asked at the beginning of the interview to describe the nature of operations. In the cacao GVC, the furthest downstream interviewee was a Swiss importer and in the palm oil GVC, this was the refinery that sold to a manufacturer. To map where materials were likely to move from that point downstream, secondary data was sought from existing studies on cacao and palm oil as well as specific information on the palm oil manufacturer available on the internet. As suggested by Fernandez and Gereffi (2011), a

diagrammatic format was followed to present the input-output structure of case study GVCs in the main findings.

A line of enquiry concerning governance is the nature of the contractual relationship between collective organisations and buyers, and the standards placed on collective organisations that oblige farmers to meet certain parameters (product, process or schedule related). How information, including standards, flows through the chain is answered by asking questions that determine the extent that the chain displays characteristics associated with different degrees of governance. If information is unimportant to the functioning of the chain, simple and easy to codify, then this would lean towards a low level of coordination needed in the chain. If the opposite is true and information is important, complex and typically done face-to-face (Humphrey and Schmitz, 2002), then it suggests more explicit coordination is required. Essentially what the interview guide is trying to determine is the extent that firms engage with buying or selling only, or also interact in a way that involves intensive exchange of information and transfers of ideas (Schmitz, 2005).

Concerning the capability of suppliers; a factor that determines the governance structure (Gereffi et al. 2005), the interview guide included questions designed to explore the extent that producers are able to effectively carry out the activities needed to participate in the chain in terms of meeting the standards that the GVC demands (Schmitz, 2005). If primary producers are not able to effectively carry out activities, then this would be reflected in heavy control and monitoring mechanisms by buyers which indicates a quasi-hierarchical governance structure (Humphrey and Schmitz, 2002, Gereffi et al., 2005), since buyers need to negate against the risk of supplier failure (Gereffi et al., 2001). There are likely to be particular elements that are important to the competitiveness of actors which are specific to the sector. If buyers have to intervene in the affairs of suppliers, then this would strongly indicate that there is a risk of supplier failure.

Relationships shape the participation of rural, agri-chain actors in the chain in terms of the way rewards and risks are distributed along the GVC (Kaplinsky, 2004b, Gereffi and Lee, 2012), the extent that the voices of less powerful actors are listened to by buyers and whether buyers create a perceived 'win-win' exchange (Frederick and Gereffi, 2009). The interview guide explores relationships by investigating how buyers interact with collective organisations and the extent that rewards and risks are considered as fair by farmers.

Closely linked with relationships along the chain is the extent that actors trust each other since long term relationships tend to foster a higher degree of trust through repeated transactions (Gereffi and Fernandez-Stark, 2011). To investigate trust, the interview guide looks to explore whether actors have had experiences of or believe that other actors will exploit their vulnerabilities or the extent that others will mislead them. If identified characteristics indicate that trust is not important to the functioning of the chain, then this would suggest a more market-based governance structure. Of course, it is certainly conceivable that trust could be low yet be important to the functioning of the chain, which would indicate a high degree of governance but a level of dysfunction. If there is a high level of trust between participants exhibited in the qualitative data, then this would suggest a governance structure that exhibits a higher degree of coordination along the chain (Gereffi et al., 2005).

Unlike other forms of capital in the economics literature, social capital in both its forms is highly context specific. Lessons taken from World Bank's attempt to create a methodology for measuring social capital demonstrate the difficulties in applying tools in different contexts (Grootaert et al., 2004, Grootaert and Narayan, 2004, Serra, 2011). Different geographical regions and contexts have different formations of social capital, for instance the social capital in one context could manifest as women's empowerment networks in India (Janssens, 2010), formalized local institutions in Russia (Petro, 2001), or even participation in North American bowling leagues (Putnam, 1995). As Krishna and Shrade (1999) note, social capital in one context can be unsocial in another, for example organised religion could be constructive in bringing people together, yet destructive if utilized as an armed militia against those who are not part of that religion.

As a result, while social capital as a concept is universal in that networks and trust are evident everywhere, its manifestation is incredibly context specific and consequently, any methodological design must be tailored to the particular circumstances that it seeks to address (Grootaert et al., 2004). The final wording of the interview guide was informed by a native translator that accompanied the researcher. This translator was not just native to Peru, but native to the area of Peru under study. The benefit of this is that wording of questions, especially those relating to trust, were suitable for participants being interviewed. The interview guide was written in English and then translated for fieldwork, by the translator. During fieldwork, responses were verbally translated throughout the interview so that the researcher was able to understand the dialogue and give guidance on prompting and probing.

The questions in the interview guide examined structural social capital by looking at dynamics in membership numbers (Adhikari and Goldey, 2010, Gotschi et al., 2009) and the extent that roles, rules, procedures and precedents support effective collective action (Uphoff and Wijayaratna, 2000). Evidence of structural social capital were sought, such as documentation that showed collective organisations had procedures in place or examples that demonstrated certain functions associated with how structural social capital is defined has been implemented (e.g. sanctioning of members). The story behind the creation of collective organisations was also explored in the guide to understand how structural social capital was initially formed to create collective organisations. Probing was used extensively to investigate how and why certain elements associated with structural social capital had been put in place so that factors enabling or constraining structural social capital formation could be explored.

Cognitive social capital was explored by asking questions that investigated the extent that relationships within collective organisations were characterized by trust and participation (Knack and Keefer, 1997, Reyes and Lensink, 2011, Botelho, 2013). This included questions on the extent that organisations are characterised by cohesion or conflict. Advice from Botelho (2013) was followed when examining trust by beginning with the commonly used and straightforward question concerning the extent stakeholders trust each other and then proving for supplemental evidence to avoid simplification of the notion of trust (Serra, 2011). Where group events exist, such as organisational meetings and workshops, the level of participation and enthusiasm was also gauged through questioning. Probing was used extensively to identify enabling and constraining factors.

To ensure that a full understanding of social capital was explored, the study investigated social capital at both the collective organisational level and the village level. This is based on the notion that social capital in one unit of analysis is embedded in a much wider social structure (Grootaert and Narayan, 2004). In the present research, the most obvious structure that farmers operate in outside of collective organisations is their villages. As a result, the interview guide also asked questions on structural and cognitive social capital at the village level as well as the organisation level.

Two pilot interviews were conducted at the start of fieldwork to assess the suitability of the interview guide. It was identified in both of these pilot interviews that local cultures and

ethnicity played an important role in how social capital is formed, particularly between farmers from the Andes region and the Amazonian east of Peru ("the jungle" as stated by participants). Furthermore, it was also clear that a cultural activity at the village level called 'minga' where farmers got together and worked on each other's farms was a manifestation of social capital and therefore this was also introduced as a formal line of enquiry after the pilot phase. In line with a heuristic research design (Bennett, 2004), an iteration was made to the interview guide to include an exploration of attitudes towards local cultures and minga as new lines of enquiry for social capital. The two pilot interviews were included in the analysis.

Fieldwork was conducted between March and June 2013, over the course of 11 weeks. A total of 30 individual in-depth interviews (formal and informal) and three group interviews were carried out for the cacao GVC and 17 individual in-depth interviews (formal and informal) and two group interviews were conducted for the palm oil GVC. Interviewing lasted between 45-120 minutes, depending on the scope for follow-up questions. In group interviews, the range of participants ranged from three to 15, depending on how many farmers wished to participate: it was common that when one or two farmers wished to participate, other farmers in the area would hear about this through word of mouth and then also wish to participate. For the purposes of anonymity and especially concerning a sensitive issue such as trust, the organisations and participants interviewed are given pseudonyms.

4.3.3 Data Analysis Strategy

On the basis of analysing a sequence of events that lead to particular outcomes (formation of social capital), a narrative analysis was carried out. Narrative analysis is put forward by Mahoney (1999) as a form of longitudinal analysis that studies sequential events which lead to a particular outcome without doing what would be considered as a formal quantitative longitudinal study where data is collected at different points of time. Likewise, Riessman (2008) sees narrative analysis as "a family of methods for interpreting texts that have in common a storied form" (p. 11). A specific element of narrative analysis is that it does not just ask "what has happened here?", but also solicits "how do people make sense of what happened and to what effect?" (Bryman, 2008). The main argument against the narrative analysis approach is that can be highly subjective because of the way both interviewer and respondent jointly construct narrative and meaning (Riessman, 2008). However as Bryman (2008) notes, although the narrative analysis approach does not capture underlying truths within a unit of analysis - this does not matter; it is

the perception of actors that are the valuable pieces of information when constructing narratives.

Although a narrative analysis depicts the general approach to analysing the data, a content analysis describes the specific tool by which the qualitative data will be analysed. Content analysis can be as modest as organising answers to the structure of a questionnaire, or as complex as identifying attitudes in verbal transcripts. Historically, content analysis has been a tool in analysing media however it has also more recently become an important instrument for organising qualitative data in the social sciences (Bryman, 2008). Quantitative content analysis has been argued as being more rigorous, whereas qualitative content analysis makes the case that reflexivity is an important process which goes beyond just counting words and requires deriving implicit meaning from text (Davies, 2007). For the purposes of the research carried out here, it is argued that reflexivity is important given the exploratory nature of the research and the significance attached to follow up questions in narrative analysis (Riessman, 2008). Therefore, a qualitative content analysis has been chosen.

A common way of organising qualitative data when doing a context analysis is to systematize and synthesize it through a *thematic framework approach* (Ritchie et al., 2003). The idea is to organise central themes and subthemes and then enter these into a matrix with corresponding cases of evidence. Since GVC governance and social capital are the principal constructs under investigation, the interaction between the two represent the central theme while lower level constructs represent the subthemes. This step of codifying qualitative data mirrors the theory building process as described by Carlile and Christensen (2005) such that qualitative associations can be made.

Governance of GVCs and social capital represent the two main analytical constructs of the methodology. For GVC governance, although no comprehensive methodological guide could be found in the literature, interview questions used in the present research were manifestations of the various characteristics that determine the governance structure of a GVC (Gereffi et al., 2005, Pietrobelli and Rabellotti, 2011) and as already noted, segments of methodology guides that include governance constructs were adopted. For social capital, the interview questions are partly adapted from the extensive methodological work carried out by the World Bank but as noted, moulded to reflect the context and culture of the research arena.

The previous discussion on operationalizing GVC governance and social capital indicated that their composite dimensions are to be compiled into an overall evaluation of each construct. The thematic framework will put together quotations, on occasions contradictory in nature in line with a negative case analysis, and then place actors along the spectrum. Based on the existing theoretical and methodological literature on social capital (Adhikari and Goldey, 2010, Gotschi et al., 2009, Uphoff and Wijayaratna, 2000, Botelho, 2013), a number of qualitative indicators of high structural social capital were explored:

- Has membership of the collective organisation grown in recent years?
- Is there evidence that the collective organisation is open to new members?
- Does the collective organisation provide the benefits that are desired by its members?
- Are there procedures in place that enable effective information sharing and participation?
- Are there rules in place to prevent members from cheating?
- In the event that members are cheating, are there enforceable sanctions in place?
- Is there clearly defined leadership in place?
- Is the collective organisation facing problems that are a result of poor management?
- At the village level, are there practises that facilitate cooperation and information sharing among farmers?

As well as qualitative themes of high cognitive social capital:

- Do members trust one another?
- Do members and the management believe in the direction of the collective organisation?
- Are the attitudes and behaviour of members conducive to cooperation?
- Is there evidence that the norms and values held by members are homogenous and shared by the management?
- Do members participate in the decision making of the collective organisation as much as they would like to?
- At the village level, do farmers cooperate with one another for mutual benefit?

In the conceptual framework, there were some potential interactions discussed between governance and social capital derived from the literature. This provided some guidance on what types of interaction were explored:

- How do standards (e.g. certification) shape the internal workings of a collective organisation?
- Does the buyer intervene and support collective organisations? If so, what consequences, if any, does this have on the way in which a collective organisation operates?
- What other evidence is there on how, if at all, information sharing and relationships between buyers and collective organisations shape the rules and roles in collective organisations and the way in which farmers interact with one another?
- If there is an interaction between governance and social capital, what consequence does this have on the interaction between structural and cognitive social capital?

Since the interviews are translated from Spanish to English, using qualitative content analysis software such as NVivo was judged to be inappropriate because the dialogue used by the participant are unlikely to be directly mirrored in the translated transcription word for word. A group of five translators, proven to be fluent in Spanish and English, were used to translate and transcribe recorded interviews with farmers and management of collective organisations, with guidance from the researcher on the format to be used. Interviews with some participants, typically those based in Lima such as the cacao importer and key informants, were conducted in English and transcribed by the researcher. The transcripts were then manually read through and thematically coded by the researcher.

Bryman (2008) advises that coding should begin from the start of the data collection process such that linkages between concepts and data can be made immediately and new issues can be translated into further questioning. Codes reflect the constructs in the conceptual framework as well as new concepts that emerge during data collection. From this process, interconnections can be made between the concepts. A coding framework based on the work by Saldana (2013) was used to identify new variables and propositions for associations in the qualitative data.

4.3.4 Context and Case Study Protocol

Ideally, case studies would be selected based on trying to contrast 'success' and 'failure' cases of social capital formation in GVCs, such that a 'most-different systems design' model could be followed (Porta, 2008). However because of the problem of identifying what constitutes a successful and failed case prior to selection and the issue of selection bias in case study research (Mahoney, 1999), the research here will instead use criteria that only filters out contexts and case studies that are specifically infeasible for exploring the research questions. Based on the following criteria, cases had to be:

- Set within a developing country context, while at the same time avoiding subsistence farming because of the serious extra-institutional challenges that they face as shown in a number of development indicators (World Bank, 2011);
- A globally exported product, thereby matching the concept of a Global Value Chain and the
 argument that export chains in developing countries are where governance is most
 observed (Kaplinsky and Morris, 2002);
- Set in a case study context where there has been a purposeful push towards forming social capital and there is already a stock of existing social capital;
- A product established in the country for longer than 2 years so that a significant historical account of the attempt to form social capital can be gauged;
- Not located in a country or local region which is unstable or where there is risk of personal danger; and
- Inclusion of participants that are accessible and a supporting individual/organisation able to
 facilitate in the data collection process. Access is regarded as a crucial factor to consider for
 data collection (Cassell et al., 2005), particularly where stakeholders in developing countries
 are concerned.

A wide range of development projects were put through the above procedure by the researcher, including 312 projects from the World Bank and 28 from USAID. However, although six World Bank and one USAID project were identified as being suitable case studies for the first five points above, the lack of available *gatekeepers* (Bryman, 2008) who could assist in accessing participants in the field made collaboration with these not viable. Other sources for case studies were followed up, in most part through building contacts with sponsors who had past experience with developing agri-chains. Out of these, cacao and palm oil in Peru, was selected as a strong candidate country that matched all the above conditions.

Cacao and palm oil GVCs in Peru met the criteria for case studies because: 1) Peru has an existing stock of social capital that can be fostered due to its rich culture and history of mutual cooperation (Munoz et al., 2007); 2) alternative development efforts in Peru explicitly aim to foster social capital among farmers using the cacao and palm oil sector (USAID, 2010); 3) GVCs are a critical element of alternative development in Peru (UNODC, 2013); 4) Peru is a middle income country (World Bank, 2011) and therefore agri-chain development is best suited compared to a subsistence based agricultural sector (Wilkinson and Rocha, 2009); and 5) the cacao and palm oil sector exhibit characteristics associated with governed GVCs (DEFRA, 2011, USAID, 2006, Kaplinsky, 2004a).

This chapter presented the methodology followed in study. The next chapter presents the first case study - the PeruCacao GVC.

5 Main Findings: Case Study One

5.1 Introduction

The preceding chapters detailed the conceptual and methodological approach used to tackle the gap in the research; namely how social capital is formed for farmers who participate in governed Global Value Chains (GVCs). This gap materialised from two observations in the literature: while the benefits of social capital in International Development (ID) has been studied extensively, the theoretical understanding of how it is formed is incomplete (Staber, 2007) and the relationship between governance of GVCs on the cohesion of farmers has not been sufficiently explored in the GVC literature (Neilson, 2008, Messner, 2004, Bolwig et al., 2010). The research is of value because of the growing shift from spot-markets to explicitly governed GVCs in developing countries (Gereffi and Lee, 2012).

As part of the methodological discussion, the criteria for context and case study selection were presented. It was judged that the chosen context for case studies should be the Alternative Development Program (ADP) in Peru and cacao and palm oil GVCs. The justification for this is that: 1) rather than a developing country facing subsistence-orientated challenges (common to many regions such in as East, Central and Western Africa) where much of the development research has been focused upon, Peru is a middle-income developing country transitioning into an industrialised state where agribusiness has more relevance (World Bank, 2003, Wilkinson and Rocha, 2009); 2) ADP explicitly aims to build social capital in cacao and palm oil GVCs and therefore lends itself for analysis (USAID, 2010); and 3) ADP seeks to bring in a multitude of external stakeholders as part of its strategy to develop social capital in GVCs, including buyers (UNODC, 2013).

The present chapter is structured in the following manner: Context of Global Cacao Sector and the Alternative Development Programme in Peru; Background of Organisations and Participants; Findings on Social Capital and The Role of Governance.

5.2 Context of the Global Cacao Sector and the Alternative Development Program in Peru

Cacao is a commodity that tends to be dominated by smallholders at the production level (Rueda and Lambin, 2012), in most part because there are few opportunities for economizing

scale upstream (Kaplinsky, 2004a). This suggests that there is a supporting role for institutions or buyers. If production relies on smallholders to deliver products downstream, then coordinative efforts would, in principle, be an important aspect in making these actors competitive because of the lack of large producers in the industry. Raynolds (2004) notes: "small-scale producers of bulk commodities - such as coffee and cacao - typically sell to export companies that can fill large orders by consolidating supplies" (p. 737). This point is further backed up in the literature (Fold and Ponte, 2008, Quarmine et al., 2012). For smallholders to be competitive, particularly those that are not in established cacao producing countries, there is a need to build up and coordinate smallholders in a way where buyers can consolidate supply. This is indeed a justification of facilitating collective organisation by ADP in the Peruvian context (USAID, 2010).

In his overview of the global cacao value chain, Kaplinsky (2004a) identifies the processes involved in the production and processing of cacao (figure 5). A characteristic of cacao is that farmers not only produce, but are also responsible for post-harvest activities such as fermentation and drying, which tend to take place near farm as opposed to a separate processor (Kaplinsky, 2004a). This was reflected in the PeruCacao GVC, with farmers from Cacao Collective and Bean Committee producing, fermenting and drying near their farms. Cacao is also very much a labour intensive process that does not involve the kind of capital required for other commodity post-harvest processing (Bardham, 2006). This was supported from observations of the PeruCacao GVC where farmers would typically use rudimentary boxes and plastic mats to ferment and dry cacao.

Cacao can be transformed into a number of end products, including cosmetics and pharmaceuticals from the use of cacao butter. However, food and drink are the most common from the use of cacao powder, divided into chocolate or confectionary and drinks. The line in figure 5 represents where the activities of producing countries end (the 'upstream') and global manufacturing and consumption begins (the 'downstream'). The PeruCacao GVC case study reflects this global structure. Cacao Collective and Bean Committee (the two case study collective organisations, as well as the rest of PeruCacao's supply base) are involved in growing, fermentation and drying while PeruCacao is responsible for exporting the cacao beans to chocolatiers for roasting and grinding. In the present case study, there was no indication that the cacao was used for cosmetic or pharmaceutical end products.

The cacao chain has a variety of different buying actors who have considerable power in the value chain. USAID (2006) identify four main categories of buyer who govern the cacao export chain in the global market: traders who sell cacao to processors and manufacturers; processors who are major producers of processed products made with cacao; manufacturers that are dedicated chocolate producers; and integrated processors and manufacturers who undertake multiple functions along the chain. Interviews with key stakeholders revealed there are a wide range of different governance structures in the Peruvian cacao sector, from independent smallholders who sell to traders in spot markets, to small collective groups that sell to exporters, and large cooperatives that export directly to processors and/or manufacturers. Based on the governance framework (Gereffi *et al.* 2005), governance would be most explicit where small collective groups sell to an exporter as it suggests a quasi-hierarchical structure and therefore this was a candidate GVC pursued as a case study. As such, PeruCacao was the sole buyer for a number of small cooperatives.

Buyers have a high degree of power not just because they control the marketing function of the chain, which in the case of the agri-sector almost always translates into a buyer-driven GVC (Gibbon and Ponte, 2005, Reardon and Farina, 2002), but because the distance (in terms of stages in the chain) between producers and consumer markets is large compared to other commodities like coffee (Talbot, 2008). The grinding stage appears to be the point where there is some crossover between producing countries and buying countries (Kaplinsky, 2004a), but from this point buyers rarely go upstream and producers downstream. This was certainly the case in the PeruCacao GVC where there was a clear distinction in geographic competencies, with the exporter located in Peru and the importer and chocolatiers located in developed markets.

As with coffee and tea, the structure of the chain reflects heavily on the global 'North-South' development divide. Cacao is a product that is defined by its locality of production in developing countries (Gilbert and Varangis, 2003) and the PeruCacao GVC typifies this global view of the cacao industry. PeruCacao exports all its purchased cacao beans to markets in developed countries, most notably to North American and European markets.

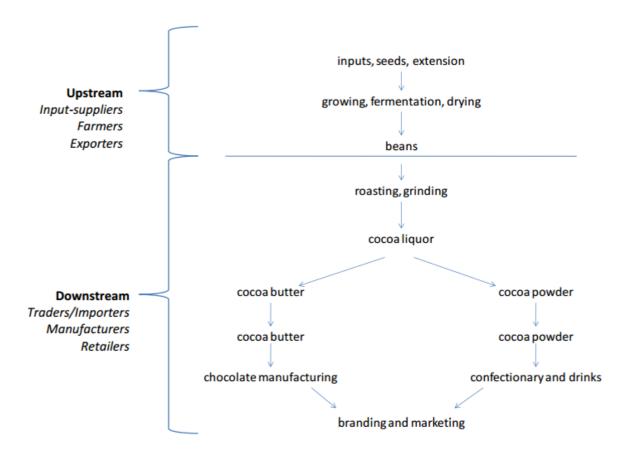


Figure 5: The Global Cacao Value Chain

Source: Kaplinsky (2004a)

Cacao in Peru is in the position of being inferior in total value compared to other exports, yet is of growing importance to rural development, both economically and socially. In Peru, cacao butter is the 16th most exported good (in value) and Peru is the 18th largest global exporter for cacao beans and 15th for cacao butter (FAO, 2011). Although cacao exports are low relative to other exported products, the growth in the national industry has been impressive over recent years. In 2001, 17.9 million USD of cacao was exported whereas in 2011, this value was 64.6 million USD (FAO, 2011). With the global price of cacao surging over recent years (ICCO, 2010), the industry presents opportunities for Peru's rural areas. The trajectory of growth at the global and national level suggests that Peruvian cacao has significant potential in the future. Although cacao is not a dominant export crop for Peru, it is grown in 10 regions that run through down the backbone of the country: around 40,000 cacao hectares (Peru Ministry of Foreign Trade and Tourism, 2007), as presented in figure 6.

Out of the top 20 highest exported goods from Peru, cacao is the second highest valued agricultural product per tonne after animal hair (FAO, 2011). Cacao in Peru finds itself in a position where value addition is vital to its continued success. The country cannot compete on quantity (compared to West Africa which alone produces two thirds of global supply), but it does have the opportunity to exploit speciality markets. In the case study GVC, there was a clear strategic importance attached to sourcing cacao that was certified (organic or Fair Trade) and of a high quality grade. Indeed on a macro-level, Peru has already made inroads into speciality markets; Zurich-based *Barry Callebaut*, the world's largest chocolate maker already uses Peruvian cacao in a high end chocolate product that targets elite consumers in Europe (Reuters, 2010).

Because of the similarity in growing conditions with coca – the base plant for cocaine; cacao has more recently been used as a method to bring farmers away coca production. This strategy has had some success, with national government, foreign development agencies and community organisations investing resources into alternative crops for Peruvian farmers. Cooperatives in particular have played an important role in this regard; one USAID funded cooperative alone in the Huánuco region serves 5000 family farms and has led to significant returns for the local area (Likins, 2012). This cooperative was utilized as a key informant in the research.

The standards for cacao are orientated towards quality concerns, mirroring the increasing prominence of standards as tools for quality control in GVCs (Gereffi and Lee, 2012). International cacao buyers will typically request that no more than a certain percentage of cacao beans (usually 4-8%) will be subject to defects (Quarmine et al., 2012). An international grading system is used for cacao where Grade I has a maximum of 3% defection, Grade II maximum of 4-8% and anything above that classified as sub-standard that can only be marketed under a special contract (Wood and Lass, 1985). These defects can be anything, from broken beans and fragmentation to the invasion of foreign matter and contamination of smoke within the bean itself. While no studies could be found that investigated the Peruvian cacao GVC on this topic, Quarmine and colleagues' (2012) study in Ghana found a significant fracture between standards set by global cacao bean buyers based on the international grading system and the knowledge of these standards within the local farm cluster. In addition to the grading system based on quality, cacao is also subject to international public standards on pesticide residue set by the Joint Meeting on Pesticide Residues (Wood and Lass, 1985, FAO, 2012).



Figure 6: Cacao growing regions of Peru

Source: Peru Ministry of Foreign Trade and Tourism (2007)

What we can take from the discussion so far is that there are two principal public standards. One is a measure of quality adopted by international buyers and the second is to ensure the global harmonization of food safety. There are also likely to be other standards that are specific to the characteristic of the market, for instance European buyers that use Peruvian cacao for speciality product lines (Reuters, 2010), the Fairtrade brand that sets its own voluntary standards (Fairtrade Foundation, 2012) and organic certification that can be specific to national contexts (ICCO, 2011). Within the Peruvian context, certification is becoming a key part of sustainable value chain development, reflected in development projects that seek to catalyse certification conversion of cacao (Bamber and Fernandez-Stark 2012).

This section outlined the contextual and historical characteristics of the cacao GVC; at the global level and within the Peruvian context. In the literature review it was identified that governance could be an important concept when considering social capital formation which sets the justification for the present research. The next section moves onto the primary analysis of the case studies and is organised under the main findings on social capital and governance, subcategorised under their respective dimensions.

5.3 Background of Organisations and Participants

5.3.1 Overview

As noted in the methodology, the organisations and participants in the present analysis are given pseudonyms to ensure that they were able to speak as freely as possible about sensitive topics such as buyer-supplier relationships and trust within organisations. Tables 6-7 and Figure 7 provides an overview of participants who were interviewed as part of the research and their connectedness to one another. While all concepts were touched upon, some participants were better placed to answer some questions than others. Cacao International and PeruCacao were interviewed primarily on governance rather than social capital as they represent the 'governors' of the GVC because they shape participation and coordination of farmers. Farmers of Cacao Collective and Bean Committee were interviewed mainly on social capital (both at the organisational and village level) as these actors were best placed to discuss relationships among their fellow farmers. HelpCacao and senior members of Cacao Collective and Bean Committee were interviewed on both governance and social capital as the actors were close to both aspects.

In addition to the main participants, other key informants were informally interviewed including the 'directive' (participants typically used the term 'directive', referring to the management of collective organisations) of Peru's largest cacao cooperative, a consultant and translator who had previously worked for Peru's national drug control commission (DEVIDA) and a research centre involved with ADP, who was also the gatekeeper. These informants were utilised because of their broad experience in the cacao sector. Rather than addressing governance and social

capital specifically, these participants were used primarily for context – a valuable contribution when conducting case study research (Yin, 2009).

Table 6: Overview of Case Study One participants

Organisation	Name	Role	Main contribution
Cacao International (Importer)	Steven	Owner	Governance
PeruCacao (Exporter)	Eduardo	General Manager	Governance
HelpCacao (NGO)	Dina	Administrator	Governance/Social capital
Cacao Collective (Collective Organisation)	Emilio	Technical Coordinator	Governance/Social capital
	Dario	President	Governance/Social capital
	Members	31 Farmers	Social capital
Bean Committee (Collective Organisation)	Coyotl	Manager	Governance/Social capital
	Ordell	President	Governance/Social Capital
	Eva	Treasurer	Governance/Social Capital
	Fabián	Social Technician	Governance/Social Capital
	Members	21 Farmers	Social capital

Table 7: Overview of Case Study One key informants

Organisation	Name	Role	Main contribution
Naranjillo (Cooperative)	Jose	Manager	Key informant - context
Agri-Research (Research centre)	John	Consultant	Key informant - context
-	Andrea	Consultant	Key informant - context

The next section details the background of the main organisation and their respective research participants. While HelpCacao is in principle a separate organisation to PeruCacao, it is summarised under the same heading due to its embeddedness within PeruCacao – reflected in its sharing of offices and describing itself as a "division" of PeruCacao. Key informants are not described as information collected from these was based on informal discussions and they are not stakeholders within the case study itself.

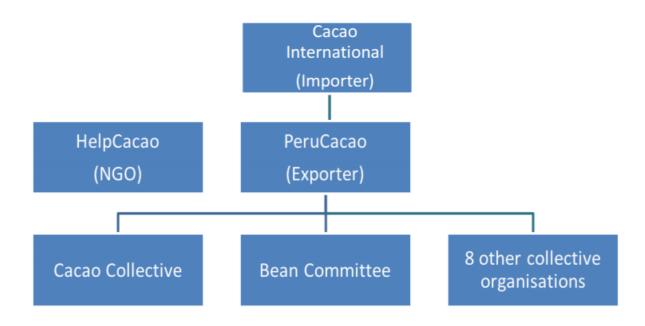


Figure 7: The PeruCacao Global Value Chain

5.3.2 The European Importer – 'Cacao International'

The participant representing Cacao International in the research was Steven, the owner. Cacao International is an importer of cacao, located in Switzerland, that sources cacao globally; from South America to West Africa. The company has been operating since 2010 and was created by Steven when he left his position as a senior purchasing manager at another large importer. Currently an estimated 5000 megatonnes is purchased by Cacao International annually, which represents 12% of Switzerland's total cacao imports according to FAO data (2013). As an importer, Cacao International previously dealt only with cooperatives that could export directly and therefore have little need to govern the GVC. However when the potential for growth of small cooperative suppliers in Peru was understood, the role of an exporter such as PeruCacao became strategically important from the perspective of Cacao International:

"We founded PeruCacao with the aim to develop basically small cacao producers who don't have market access directly... That was our aim, to have access to these farmers and consolidate from small groups that are emerging in many places...the established cooperatives are not growing at the pace of the increase of cacao growing overall... the established cooperatives can only take a part of that so working with only these cooperatives that can export themselves would have meant not to consider all the potential that is there" (Steven, Owner, Cacao International)

With an overarching strategic incentive to invest in Peru's smaller collective organisations, Cacao International followed an alternative governance model for these smaller collective organisations that went beyond the spot-market relationships that Cacao International had with the larger cacao cooperative exporters.

5.3.3 The Exporter – 'PeruCacao' and 'HelpCacao'

The two participants representing PeruCacao is its General Manager - Eduardo, and Dina who is the administrator of HelpCacao and acts as PeruCacao's dedicated support arm. Eduardo was previously the manager of a cacao cooperative. In 2010, he was hired by Steven to set-up and manage PeruCacao as a subsidiary exporter of Steven's former employer. But when Steven left his previous employer to create Cacao International, he bought PeruCacao and since 2012 PeruCacao has been the subsidiary exporter of Cacao International. The company has 16 employees and works with small cooperatives around Peru, from the Apelina River Valley to Ucayali.

As some authors have noted, it is common for an exporter to take the principal role of coordinating the GVC on behalf of actors further downstream (Lee et al., 2012, Tran et al., 2013). The PeruCacao GVC reflects such a model where the exporter, PeruCacao, coordinates its collective suppliers on behalf of its parent company Cacao International. Since being acquired by Cacao International, PeruCacao has expanded its customer base to a range of different sized importers, wholesalers and chocolatiers that are based mainly in Europe, although around 10% of the cacao beans go to North America where they are reshipped to other countries. The offices of PeruCacao are based in the capital, Lima (Figure 8).

PeruCacao has a NGO called HelpCacao which shares the same offices in Lima and, although is legally a separate organisation, acts as a dedicated support arm to the company. The NGO was first created in 2011 as a "project area" to facilitate the inflow of development funding from the outside so that PeruCacao does not bear all the costs of developing its supply base. During informal discussions with key informants, it was suggested that this structure of a dedicated NGO, coordinated by a buyer and in essence part of the GVC itself, was mirrored across Peru in the cacao industry.

Typically projects that HelpCacao organises are through co-investments whereby PeruCacao provides 30-40% of the total cost and the remainder is funded by international NGOs or the Government of Peru through ADP. At the time of the interviews, HelpCacao was currently implementing three projects, the most recent being a six month project working with two of PeruCacao's cooperatives to improve the technical capacity of farmers. Another project currently being implemented is with the international research centre who is served as a gatekeeper (Bryman, 2008) or in other words the actor who facilitated access to the subjects in the present research.

5.3.4 Collective Organisation 1 – 'Cacao Collective'

While a number of participants were involved in the research on Cacao Collective, the broader contextual information around the cooperative was in most part gathered from semi-structured interviews with managerial and administrative members of the organisations, as well as insights from PeruCacao and HelpCacao. During interviews, some farmers were revealed to be founding members of Cacao Collective which then served as an opportunity to drill deeper into the history of the organisations. A group interview was held with administrators of Cacao Collective followed by individual interviews with the Technical Coordinator and President.

Emilio is the technical coordinator of Cacao Collective who, in effect, acts as the manager of the organisation. While he has been in a technical role within the cooperative for three years, he only took over the managerial role six months ago. Prior to both positions, Emilio was working for the local municipality and is a cacao farmer himself. Dario is the President of the cooperative. His role is to support and manage projects and he has been in this position for six months and, like Emilio, is also a cacao farmer. Both participants joined the directive at a time when there was a change in leadership after the two year term of the previous directive expired.

Cacao Collective was first created by a group of farmers in 2008 who decided to begin organising so that they could receive support from a project, initiated by the Government of Peru as part of ADP, called 'Winrow':



Figure 8: Geographical location of PeruCacao, Cacao Collective and Bean Committee

Source: University of Colorado (2000)

- PeruCacao
- Cacao Collective
- Bean Committee

"There were a lot of buyers, cheap ones, but organising ourselves we wanted to look at the prices and volume. There were gatherings, people were talking about the needs and so on... I was amongst the first people to work with Cacao Collective. Before there was just a committee of producers, not working with cacao. Then an association was formed for those who work with cacao and we looked for support for cacao growers.... We needed to get money and support from Winrow. That is why we created Cacao Collective" (Farmer, Founding Member, Cacao Collective).

Winrow was also cited by farmers as being the main driver behind switching to cacao from coca production, indicating that it catalysed both the initial creation of PeruCacao and the growth of its membership. Before 2010, Cacao Collective sold at the local level to a range of buyers — mainly other cooperatives, including those that were mentioned by Steven as Cacao International's large-scale suppliers. However in 2010 the cooperative signed a contract to begin exclusively supplying cacao to PeruCacao. This led to a significant change in the way the cooperative had to operate and manage itself, in part coming from the demands driven from organic certification - an issue that is explored later in this chapter.

In 2000 the cooperative had 30 members, but associational membership has since tripled to over 300 members, becoming the largest cacao cooperative in the region. This is in contrast to its neighbouring region of Huanaco where the largest cooperative has 5000 members. Due to this there is a mix of old members, mostly those that were founders of Cacao Collective and therefore have been members for five years, and new members - some of which joined as recently as within the last 12 months.

5.3.5 Collective Organisation 2 – 'Bean Committee'

Coyotl has been the manager of the organisation since 2011 and is responsible primarily for reaching agreements with buyers and setting up projects for farmers. Ordell has been the President since 2008 with exception to resigning in 2011 and then being reinstated the following year after a dispute with some of the members. Ordell is mainly responsible for liaising with the directive and chairing assembly meetings. Eva has been the treasurer of Bean Committee for two years. As treasurer, her main role is to organise the finances of the organisation and to pay the members when they bring in their cacao. Fabián is the social technician, co-funded by PeruCacao and a Swiss international development organisation, whose role is to support Bean Committee's development.

Bean Committee was created in 2009 resulting from an assembly meeting between the mayor of the local town and a group of cacao farmers who saw this as the best path to improve the quality and therefore price of cacao through linking with a buyer:

"We were created in an assembly, with the mayor... There were some people in the town hall who had cacao and we started talking about the quality of the cacao that is bought and so on, we wanted to get a better price... After a third year of not knowing how to progress, we thought this would be the way forward. We did it little by little and from there we put someone in charge to buy so we could see if it was done well - like a directive, organised with admin, to be able to function well" (Eva, Treasurer, Bean Committee)

"We were told that organic cacao would get a different price. We wanted to form a committee to try and find a buyer" (Farmer, Bean Committee)

While not strictly a cooperative in the sense that it has that legal status with the government of Peru, Coyotl noted that Bean Committee functions like a cooperative in that there is a manager, President, administrative support and an assembly of members, with the same decision making structure as Cacao Collective. There is a mix of small and large farmers, with 80% growing around 2-2.5 hectares of cacao and the remaining 20% who grow more than 5 hectares. There is also a mix of old and new members, with 15-20 new members joining in 2012. While there are currently 100-125 members, two years ago there were up to 400 members in the committee (an issue which is explored later). In 2010 Bean Committee entered into an agreement with PeruCacao to become an exclusive supplier.

5.4 Main Findings on Social Capital

5.4.1 Introduction

This section presents the evidence of social capital of farmer members in two case study collective organisations; Cacao Collective and Bean Committee. Two dimensions of social capital identified in the literature are addressed: structural social capital, defined as the roles for decision making, rules, procedures and precedents that supports mutually beneficial collective action and associated with increased associational membership (Adhikari and Goldey, 2010, Gotschi et al., 2009); and cognitive

social capital, defined as the norms, values, attitudes and beliefs that incline people to cooperate based on their inclination to trust one another (Uphoff and Wijayaratna, 2000).

Given that social capital is deeply embedded in wider social structures (Grootaert and Narayan, 2004) and Peru has a heritage of informal farmer groups at the village level (Munoz et al., 2007), farmer members of Cacao Collective and Bean Committee were also questioned on social capital within their respective villages. 'Minga' – 500 year old farmer working groups identified in the analysis, have characteristics associated with formalised rules, procedures and precedents and therefore these findings are discussed under 'Structural Social Capital'. Informal cooperation among farmers is discussed under 'Cognitive Social Capital' since they have more in common with everyday norms, values, attitudes and beliefs at the village level.

5.4.2 Structural Social Capital

One way of measuring structural social capital is to track changes in associational membership (Adhikari and Goldey, 2010, Gotschi et al., 2009). For Cacao Collective, the evidence strongly suggested that based on this indicator, structural social capital had risen exponentially (Figure 9). Beginning with 30 members in 2000, by 2011 associational membership in Cacao Collective grew to 231 members. In addition, looking at network openness as an indicator (Eisingerich et al., 2010), all the farmers interviewed in Cacao Collective and Bean Committee stated that there were no identifiable barriers to joining the organisation.

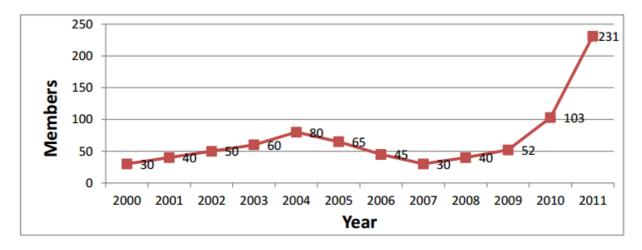


Figure 9: Membership growth of Cacao Collective, from 2000-2011

Source: Cacao Collective and PeruCacao

The exponential rise in associational membership between 2009-2011 coincides with entering the PeruCacao GVC – discussed under the 'The Role of Governance'. However while there was an exponential rise in membership after integrating into the GVC, another rise was experienced between 2000-2004. During this period, membership rose from 30 to 80 members but then fell back to 30 members soon afterwards – a phenomenon that demanded further inquiry as it brings into question the nature of structural social capital. This dynamic was explained by a founding member to be the result of new members that did not grow cacao at all and had only joined to receive credit; a consequence of poor control and monitoring mechanisms that are considered dimensions of structural social capital:

"It is better organised now. In the past others wanted to be members who did not have cacao plantations. Now we are addressing this and now there are only active members... They weren't aware that these people were not cacao growers... Now they check - the technicians go and see" (Farmer, Founding Member, Cacao Collective).

Building on this point, at the time of interviews was an assessment currently in process to evaluate current members and, if deemed to be breaking the rules (e.g. side-selling), they would also be sanctioned through exclusion from Cacao Collective – corresponding with sanctioning as an enabler of social capital formation (Molinas, 1998, Woolcock, 1998). The expectation by the technical coordinator was that up to 50 could be removed. Interestingly Bean Committee experienced almost the identical phenomenon with a spike in early membership growth. When Bean Committee was first created in 2009, 200-250 members joined the organisation. However this soon fell to 125 from 400 and only 35 are now considered 'active' members in that that these tend to be the ones involved directly with the decision making process of the organisation. The remaining 90 members only come to Bean Committee to sell their beans rather than socially participate:

"We consider we have around 35 who are involved directly with decision making processes within the organisation... The rest do not get involved in the organisation itself. They are more like commercial associates, they are only interested in being capable of selling their products... they sell and they go away." (Coyotl, Manager, Bean Committee)

Mirroring Cacao Collective, many of those who initially joined Bean Committee did not grow cacao, seeking only to receive credit and fertilizer which they would then sell on. This was solved through

field visits by the technicians provided by PeruCacao. The experiences of both case study collective organisations show that, as Serra (2011) argues, the use of associational membership as a proxy of social capital is not always a true reflection because it misses deeper qualitative dimensions of social capital – dimensions that are covered in the present research. Ironically, for both organisations, the problem was solved through an improved monitoring system and more stringent rules - qualitative dimensions of structural social capital (Uphoff and Wijayaratna, 2000). Even though Serra questions the issue, this case study represents the first known empirical account of the conflict between associational membership as a proxy indicator and the nature of social capital as a construct.

From interviews and observations, there was strong evidence to suggest that procedures had developed in organisations. New control systems were put in place within the organisations in terms of recording various aspects of organisational activities. According to the social technician at Bean Committee, the control card system that recorded a number of different aspects of members' interaction with the committee was having a positive impact on both the management of activities and the interest that members showed in the organisation, as reflected in a gradual increase in contributions – a component that enables social capital development (Narayan, 1997):

"We call them control cards; one is for checks on [the attendance of] meetings, one for contribution checks and one for checks on remittances... what helps a lot is for them to manage it, as there was nothing and what we are seeing is that gradually they are contributing little by little and they are gradually showing more interest" (Fabián, Social Technician, Bean Committee)

"It is organised better, we sell more and can keep control of how things are done. We can follow the member more closely and what he is doing. Each month we can see what has been produced. We've gained experience in this area" (Eva, Treasurer, Bean Committee)

"We started to have more control and set out objectives, goals for the organisation, as it remains now, which didn't exist before" (Coyotl, Manager, Bean Committee)

These control cards – simple booklets, recorded different aspects of members' interaction with the committee such as attendance to meetings, member contributions and transactions. According to the social technician, the introduction of the control cards had a positive impact on the functioning of the organisations. In particular, it encouraged members to contribute more and show more

interest in the organisation. The findings reinforces the role of low cost monitoring mechanisms as an enabler of social capital in a developing country context (Ostrom, 1992, Becker and Ostrom, 1995).

While better monitoring systems had been put in place, procedures associated with the financial health of collective organisations had proven to be less successful and had a negative bearing on the scope for mutually beneficial collective action. The ability of collective groups to meet their financial obligations was a serious problem identified in the case study. Dina noted that some of the collective groups had taken out loans from banks but were unable to pay these loans back on time. During fieldwork it was observed that the manager of PeruCacao was deeply concerned about an unpaid loan of 60,000 soles (£13,300) provided to Cacao Collective — his concern was reflected in an emergency call for advice to the research centre which facilitated the present research.

The broad problem of unpaid debt was the result of loans provided to groups that had not been used for the intended purpose of building certification capabilities, instead being given out as cheap credit to farmers, as well as a lack of contributions from members to pay back their organisations' debts. This was not just confined to the loans provided by PeruCacao but also financial institutions where according to Dina, the groups would take out credit from financial institutions but "after that they don't pay on time and the debt is increasing, increasing, increasing". Based on the notion that dimensions of structural social capital include effective rules and procedures that supports collective action, the evidence suggests this was an aspect that the two case study collective organisations historically struggled with.

Despite this, there was also the acknowledgement that progress was being made in solving these problems through more effective control and monitoring mechanisms and better leadership. The control cards introduced at Bean Committee recorded individual contributions of members, whereas in the past there had been no mechanism for recording contributions in place and an accountant had been funded by PeruCacao to organise the finances of the group. In addition, Bean Committee also tackled the problem of farmers missing assembly meetings — an important arena for the group to discuss issues of finance, by sanctioning them:

"Sometimes we discuss finance in the assembly. Some farmers don't go to the meetings, so the committee introduced a payment of 20 soles [for not attending], which is like a fee, and this money goes towards helping those who are ill." (Farmer, Bean Committee)

Cacao Collective had also begun to sanction members who did not pay the basic contribution of 30kg of cacao per year and Emilio, acknowledging that "the more controversial topics are to do with contributions", still appeared to be driving the importance of this in assembly meetings as corroborated by interviews with farmer members. The evidence suggested that that while some aspects of structural social capital was poor in the past, it was in the process of being improved.

Defined roles is regarded as a key dimension of structural social capital (Uphoff and Wijayaratna, 2000) and in the wider development literature, it is generally agreed that leadership is essential in shaping effective collective action (Serra, 2011, Vollan, 2012, Goetz and Rupasingha, 2006, Krishna, 2004, Kaganzi et al., 2009). While better procedures and enforceable rules had been implemented despite problems in the past, the evidence of defined leadership roles was more complex. From the perspective of Dina and Eduardo, a barrier to developing suppliers was that managers of collective organisations did not act as strong leaders or that the role of the manager and others functions were not well defined:

"If I was the General Manager and I say 'we need to make this', the directives say 'no no no no!' I would like them to know the difference between the functions... they don't permit these people, the coordinators [managers], to work... they have to know the difference between the activities to the General Manager and the Directive" (Dina, Administrator, HelpCacao)

"Some of the farmers think that they are General Managers, and that's a big problem."

(Eduardo, General Manager, PeruCacao)

The General Manager of PeruCacao judged that out of the 10 organisations that they source cacao from, three continued to have serious internal problems and this was linked to weakness in leadership. Eduardo linked poor management with poor quality of cacao: "if there is no transparency and there are bad people working in the cooperative, the beans will be bad". Indeed in Cacao Collective, the barriers to establishing leadership was embodied by Emilio's decision to be called a technical coordinator rather than a manager, with Dina stating that Cacao Collective did not want to give someone the name of 'manager' because it induced jealousy and Emilio confirming this notion: "I don't like saying I am the manager".

There was evidence that more defined leadership roles were emerging in Cacao Collective and Bean Committee despite problems in the past, indicating improved structural social capital. Both case study collective organisations had gone through dramatic changes in its leadership, with members of both directives being replaced due to the perception of managerial incompetence by its members - in particular poor financial management and in some cases suspicion of corruption by some of the farmers interviewed. Although not wishing to officially call himself a manager, Emilio regarded his role to be managerial and was driving to establish more "entrepreneurial" leadership within Cacao Collective:

"Emilio (says) he is much more like a manager. The other directive they had farmers thinking like farmers and they were only thinking about the price of cacao and not about the cooperative" (Field Translation: Emilio, Technical Coordinator, Cacao Collective)

Further to this point, in 2011 Bean Committee employed individuals to fill defined roles within the organisation which traditionally had been carried out by other members of the group. An accountant had been installed to organise the group's finances and Coyotl had also been employed to fulfil the role of manager (the funding of which are discussed under 'The Role of Governance'). The evidence suggested that defined roles for decision making as a dimension of structural social capital was in the process of development in the case study collective organisations.

As noted, social capital within a group is typically embedded in wider social structures and therefore farmer members were also interviewed on social capital at the village level. In particular, a ritual called 'Minga' emerged in the analysis - farmer working groups with roots in the Inca period and entrenched in Andean culture. Minga can be viewed as a form of structural social capital since it is a collective activity that follows established procedures and precedents and is a framework, with rules and regulations, for farmers to cooperate (Uphoff and Wijayaratna 2000).

These farmer worker groups were organised by village leaders and farmers who did not participate in the village were fined 50 soles, suggesting that leadership and sanctions were mechanisms for Minga to operate in and maintain itself as a custom. Even when studying a 500 year old tradition, the findings support the literature on leadership and sanctions as factors in social capital formation (Serra, 2011, Vollan, 2012, Goetz and Rupasingha, 2006, Krishna, 2004, Molinas, 1998). It was stated in a group interview held in a village with members of Cacao Collective and the interview with the

President of Bean Committee that Minga was no longer conducted in their respective villages, because the diversity of cultures and backgrounds meant that this custom had been lost:

"No, we haven't done that in this little town. There are all kinds of people, from the jungle, from the highlands, from the coast, rice growers and others, there is a different thinking" (Farmer Group Interview, Cacao Collective)

"Where I am from, we are used to do Minga in a collective effort so it [producing cacao] is more affordable, but things aren't like that here." (Farmer, Cacao Collective).

"The non-participation [in Minga] arose when our food regimes were different, for example I am vegetarian. That was the reason we could not do it." (Ordell, President, Bean Committee)

The first quote refers to the migratory paths in Peru which has led to ethnic and cultural diversification in villages of the Amazonian and this was supported by the interview data - every farmer questioned noted that there was a mixture of indigenous Amazonian families and families who had migrated from the Andes, as well as some households which had come from the Northern coast of Peru. The second farmer originally came from the Andes but had migrated to the Amazonian. Ordell's comments related to the fact that as a 7th Day Adventist, he and others who followed that religion could not eat meat, whereas Evangelicals, Catholics, Pentecostals and Baptists could. As was revealed in interviews with other stakeholders, the ceremony of cooking a large meal for the village to eat was an essential part of the Minga custom and therefore the diversity of religion represented a barrier to establishing the ritual that held together these farmer working groups. The evidence also suggested that Minga farmer groups were culturally embedded - with the majority of farmers interviewed stating that they conducted and participated in Minga in their respective villages because this was the traditional norm - as one farmer from Bean Committee noted: "It is old. We've always done this" and another from Cacao Collective stating: "It is a duty, an obligation".

The benefits of Minga were stated within the context of efficiency and productivity; with interviewees noting that by farmers harvesting each other's plots systematically, the process could be completed quicker than if each cacao farmer harvested their own land individually. This links with the relationship between social capital and productivity in the literature (Uphoff and

Wijayaratna, 2000, Vasilaky, 2013, Binam et al., 2004). There was also evidence from one interview where a farmer from Cacao Collective noted that as a direct result of village group meetings, a road was now being built which would mean that farmers would no longer have to transport cacao by boat, supporting the notion that social capital is lined with the creation of public goods (Janssens, 2010).

The evidence suggested that while there was structural social capital at the village level in the form of Minga, this ritual was diminishing, with the key link being culturally diverse sets of farmers coming together from different parts of Peru. These findings support the literature arguing that ethnic or religious diversity can have a negative relationship with social capital formation (Woolcock, 1998, Beard, 2007, Klitgaard and Fedderke, 1995, Easterly and Levine, 1997, Castle, 1998, Huffman and Feridhanusetyawan, 2007), contradicting evidence which suggests otherwise (Bhattacharyya et al., 2004).

Table 8 summarises the main findings on structural social capital. The next section moves onto the main findings on cognitive social capital.

Table 8: Summary of Case Study One findings on structural social capital

Features of structural social capital	Main findings
Associational membership	Membership of collective organisations base grew significantly since creation, however the use of associational membership as a proxy of structured social capital was brought into question in the case study due to conflict with qualitative aspects of structural social capital prior to 2009. Despite this, associational membership growth from 2009 onwards was supplemented with improvements in qualitative aspects of structural social capital.
Defined roles for leadership	Both Cacao Collective and Bean Committee showed evidence of more defined leadership roles, with Emilio taking a more entrepreneurial role and a dedicated manager being introduced at Bean Committee for the first time since its creation.
Effective rules, procedures and precedents	Evidence indicated more effective rules and procedures put in place. Control cards introduced at Bean Committee and sanctioning of members who side-sell at Cacao Collective. However while strong at the organisational level, the precedent of conducting 'Minga' at the village level was diminishing due to perceived cultural and ethnic diversification.

5.4.3 Cognitive Social Capital

Uphoff and Wijayaratna (2000) define cognitive social capital as norms, values, attitudes and beliefs that incline people to cooperate based on their inclination to trust one another. While structural social capital is more concrete in that it can be measured through observable artefacts (control cards, for example) and quantitative measures such as associational membership, cognitive social capital is less tangible as it is associated with qualitative dimensions such as trust and participation (Knack and Keefer, 1997, Reyes and Lensink, 2011, Botelho, 2013). The previous section presented evidence that structural social capital had increased, however the evidence on cognitive social capital in this section presents a more mixed picture.

The previous section laid out how Emilio saw his role as more "entrepreneurial", compared to "the other directive [that] had farmers thinking like farmers", matching a more defined role in decision making. However this conflicted with how farmers believed the nature of a manager should be, with one farmer noting that it was important for the directive to have the 'peasant spirit':

"In order to be a good Manager, they need to have a working spirit for peasants. How can I say? A policy... he needs to understand the peasant. They need that 'peasant spirit'." (Farmer Group Interview, Cacao Collective)

The case study pointed towards conflict, not just recognised by farmers but also other members in the directive, with the way that Emilio had taken a more defined role as leader. The way that price was negotiated was a particular barrier to cognitive social capital within Cacao Collective. Several farmers interviewed were discontented with the price set by PeruCacao, seeing this as unfair and a consequence of the personal relationship between Emilio and PeruCacao and there was similar discontent on the role of the manager in Bean Committee:

The technical coordinator tells us [the directive] not to get involved in what isn't our business, that we don't have the right to know the prices" (Dario, President, Cacao Collective)

"There were some issues, they wanted to be the main characters of the whole situation. If they (PeruCacao) talked to me, it was seen as a matter of going above their heads. It was more a kind of a management jealousy" (Emilio, Technical Coordinator, Cacao Collective)

"In the directive there are always some internal issues... some argue about the administration, the role of the manager" (Farmer, Bean Committee)

The findings suggested that this new managerial role established in both collective organisations created tension, not just between farmers and the directive but within the directive itself. Structural social capital had risen as manifest in more defined leadership roles within organisations; however this was accompanied by mistrust in these new leadership roles because members felt they were less included in the decision making process – as Eduardo noted: "some of the farmers think they are General Managers, and that's a big problem". Given that trust is a proxy of cognitive social capital (Knack and Keefer, 1997, Reyes and Lensink, 2011, Botelho, 2013), the findings suggest that cognitive social capital deteriorated after more defined leadership roles emerged within the cooperative where none had existed in the past, suggesting that the high rise in structural social capital driven by PeruCacao corresponded with a fall in cognitive social capital.

Cognitive social capital includes the attitudes that incline people to cooperate (Uphoff and Wijayaratna 2000). The managers from Cacao Collective and Bean Committee noted that operating costs of running their organisations meant that when external traders offered a slightly higher price, some farmers would cheat on their agreement and sell elsewhere. Taking a quote from Coyotl:

"One of the main issues is pricing, due to the fact that the organisation has to cover operational expenses. Sometimes the competitors or middle men may offer 1 point more than us for cacao, so the producers go to them" (Coyotl, Manager, Bean Committee)

This was also corroborated by Dina who stated that a lack of commitment to organisations was signalled by a propensity to side-sell. According to Ordell, this was a problem especially acute for Bean Committee, where they could not sanction members because the small group size meant that excluding members threatened the existence of the organisation all together. Cacao Collective could however sanction members and even had plans to cut off members who regularly cheated – for Cacao Collective; losing members did not mean losing the organisation. This finding goes against the notion that small group size necessarily enables effective collective action (Becker and Ostrom, 1995). The issue of members cheating links with diminished cognitive social capital

because a lack of norms conducive to cooperation hampered the scope to attain mutual benefits (Kaganzi et al., 2009).

Although there had been investment into structural social capital, evidenced from better monitoring mechanisms and a change in attitude of leadership, the propensity of members to financially support their respective organisations remained a significant barrier for both Cacao Collective and Bean Committee. Emilio noted that the issue of contributions was the "single most challenging issue" facing Cacao Collective, not least of all because of the debt and administration costs. This was despite workshops set up by HelpCacao which aimed to encourage members to not just contribute more to their respective collective organisations but more broadly educate members on the importance of working towards a collective goal: "to create a consciousness", as Dina described it, noting how challenging it was to create this commitment by members. The propensity to contribute was linked to the notion of trust – a dimension of cognitive social capital (Knack and Keefer, 1997, Reyes and Lensink, 2011, Botelho, 2013):

"There are some members that don't want to contribute to the committee... I think that people do not want to contribute or are not up to date with their contributes, it is about mistrust... mistrust of the leaders of the organisation" (Farmer Group Interview, Bean Committee)

The findings from the case study suggested that while there were rises in structural social capital, the process of cognitive social formation was less successful as evidenced by mistrust, a lack of contributions and an internal conflict over a more defined role for management. This was in spite of efforts by PeruCacao to develop both structural and cognitive social capital — a dynamic discussed under the 'Main Findings on Governance'. There was a realisation that the scope for improving cognitive social capital and getting 'buy-in' into the changes in structural social capital depended very much on cultural embeddedness and that developing norms of cooperation would be a slow process:

"We can only give them the tools to improve some aspects and if they learn and they make it – good, but if they don't... San Martin farmers want to learn... they are more talkative, more outgoing. People from the south, they don't trust... farmers in the North participate more than farmers in the South" (Dina, Administrator, HelpCacao)

"It [developing the organisation] is a cultural thing, one that will slowly and progressively change" (Coyotl, Manager, Bean Committee)

It is generally considered in the literature that culture and historical context influences social capital formation (Coleman, 1990, Akwabi-Ameyaw, 1997, Molyneux, 2002, Nilsson et al., 2012). It was regularly cited in interviews with a variety of stakeholders that the cultural difference between farmer groups originating from the Andean region compared to the Amazonian region impacted the propensity to work together. The analysis suggested that there was an association between cognitive social capital and cultural and historical elements, supporting the literature. This was even more evident when shifting focus from the organisational to the village level.

Informal relationships among farmers at the village level has more in common with cognitive social capital than structural social capital due to a lack of formalization and embeddedness within norms of behaviour (Uphoff and Wijayaratna 2000). Most farmers interviewed did trust their neighbours, although there were some exceptions. The analysis showed that farmers who did trust others in their community noted how important it was for relationships to be built over time and through repeated interactions, supporting the literature on this aspect of social capital formation (Lyon, 2000, Ostrom, 2000). Where mistrust occurred, this was typically due to single events such as suspected theft by a neighbour or a broader judgement that they did not share the same values. Some farmers noted that they felt closer to other farmers who were from the same cultural and ethnic background, with a distinction between those from the Andes and those from 'the jungle'. This was also reflected in the religious diversity in Ordell's village as described under 'Structural Social Capital', where cooperation was limited as a result of the variety of different religious beliefs that villagers held.

A key benefit that resulted from relationships at the village level was the sharing of information and learning, noted by several farmers but summarised effectively by one:

"We talk about cacao, about the insects, fertilisation, trimming, harvest, fermentation, boxes, drying process... the positive thing is that at times you might do something wrong, they will advise me and I can improve or correct things" (Farmer, Bean Committee)

Farmers interviewed noted that they gain information about new production techniques from their social relationships with other farmers, in particular the use of better fertilizers. It is argued in the literature that social capital enables farmers to adopt new agricultural innovations (van Rijn et al., 2012, Lambrecht et al., 2014) and the findings here suggest that this holdstrue.

This section laid out the evidence on cognitive social capital formation of the two collective organisations and at the village level where members are embedded. Table 9 summarises the main findings. The next section addresses the role of governance in the present case study.

Table 9: Summary of Case Study One findings on cognitive social capital

Features of cognitive social capital	Main findings
Norms and values	At the organisational level, norms and values not congruent to cooperation. Resistance from farmers to increase member contributions. Some farmers cheating by side-selling to other buyers. Although limited cases, contrasting norms and values at the village level shown to be a barrier to cooperation.
Attitudes and beliefs	Evidence of mistrust in management by farmers and among the directive itself. At the village level, evidence of broadly trusting relationships.

5.5 Main Findings on Governance

5.5.1 Introduction

Governance is the notion that in some value chains, buyers have authority and power relationships that shape the participation of suppliers in the chain (Gereffi, 1994, Humphrey and Schmitz, 2004). Where social capital can be regarded as a horizontal concept (Putnam, 1995), governance is a vertical construct where actors interact with each other from beyond their local systems (Bolwig et al., 2010). Based on the literature, the findings on governance are organised within the following dimensions: Certification Standards; Risk of Supplier Failure and Buyer Support; Information Flow and Relationships and Trust.

This section begins with presenting evidence of individual dimensions of governance from the case study and then presents the case on the role of each dimension on social capital formation. References to the previous section on social capital are interwoven into the discussion to demonstrate where and when governance did (or did not) coincide with the process of social capital formation.

5.5.2 Standards

Certification standards represent a significant mechanism of governance in GVCs because they place specific parameters on the participation of suppliers (Bolwig et al., 2010). In particular, certification drives the 'what' and 'how' aspects of standard setting in governed GVCs (Reardon and Farina, 2002, Reardon et al., 2001b). When strict standards cannot be met due to suppliers not having the require capabilities, then the incentive for governance over the chain from buyers grows (Gereffi *et al.* 2005).

Within the present case study, the dominant standard being driven by PeruCacao through its supply chain is organic certification. The two case study collective organisations are in different stages of the three year conversion process; 71 farmers in Collective Cacao are in the final year of certification while Bean Committee has only started its first year of the process. Increased price for cacao was the stated motivator behind seeking certification by farmers and the management of the collective organisations, summed up by the President of Collective Cacao when asked why farmers adopted organic certification: "For farmers, it is always about improving the price".

Prior to beginning the organic conversion process, the cooperatives acquired UTZ certification which according to the technical coordinator of Cacao Collective was a relatively easy process - to the extent that while initially it gave them a price advantage, this advantage dissipated as all the other cooperatives in the local area acquired it:

"It is really easy to get this [UTZ] certification because they don't have to avoid slash and burn, for example they only had to clean up all of this [the cooperative building]. But at the beginning they had an added price to cacao because of UTZ but after three years all of the cooperatives also had UTZ so it was even" (Field Translation: Emilio, Technical Coordinator, Cacao Collective).

Slash and burn, while allowed under UTZ, is prohibited under organic certification. This process, where old crops are burnt to fertilize the soil while production moves to a different plot of land (essentially creating a cycle of growing, burning and moving), was cited as a particular problem because it is a practice deep rooted in the agricultural culture of Peruvian farmers. There was also evidence from interviews with farmers to suggest that not being able to use chemicals and the broader change in methods were also barriers, although competing accounts suggested that for some farmers the process was not especially difficult. Clearly the barriers of organic certification

were higher than UTZ and the price advantage of UTZ had dissipated as a result, matching the notion that while such barriers create temporary advantages in GVCs, they are eventually eroded by competition (Kaplinsky, 2004b).

In addition to the technical challenges of organic certification was the associated monetary cost, with stakeholders from both organisations noting that they could not afford it on their own (an issue discussed in more detail later). The evidence suggested that the move to acquire organic certification created significant challenges for Cacao Collective and Bean Committee due to the stricter rules and requirements, reflecting a high degree of governance over the GVC since as standards intensify and the capabilities are not sufficient (in this case monetary), the incentive for a buyer to manage its suppliers increases (Gereffi *et al.* 2005).

From the interviews with Steven and Eduardo, it emerged that the strategic importance of certified cacao is a major driver for governance over the PeruCacao GVC. Having PeruCacao as an organiser of small collective organisations allowed Cacao International to control certification and meet traceability standards back to the individual farmers. Because of the growing end market for certified cacao (ICCO, 2013), supporting organic certification back to the farmer level is also a way for Cacao International to organise the GVC such that it can ensure the supply of traceable organic cacao. When asking Steven why Cacao International had adopted this particular governing model:

"We have our own control over all the certifications and traceability back to the individual farmer.

We don't want to just buy cacao here and there to earn some money. Traceability is the key word"

(Steven, Owner, Cacao International)

Humphrey (2006) suggests traceability in credence goods such as organic certified agricultural produce has a particularly strong impact on governance because it *necessitates* control from buyers over the GVC and the rationale provided by Steven supports this view. Tran *et al.*'s (2013) research on the impact of certified shrimp in Vietnam also mirrors that of certified cacao in the present research – certification is a motivating factor for buyers to manage and govern farmers in GVCs. However it is also important to highlight the wider strategic context behind this. As Steven noted, the latent growth of certified cacao in Peru lay with small collective organisations rather than established cooperatives and ultimately this was the incentive to create and use PeruCacao as a governing mechanism in the chain. Without this overarching strategic driver, the rationale for governance of small collective organisations appears to be lost in the present case study.

In addition to the standards manifest from organic certification, PeruCacao also demanded the quantity of cacao to be produced by collective organisations – reflecting the 'how much' element of standard setting in governed GVCs (Humphrey and Schmitz, 2004). As part of the contractual agreement between PeruCacao and its supply base, collective organisations were obligated to produce a set quantity of cacao. Both collective organisations needed technical support to meet these quantities and this support came from PeruCacao (a dynamic discussed in the following section).

There was no evidence in the case study that suggested that organic certification as a dimension of governance had a *direct* correspondence with social capital. However organic certification, combined with a wider strategic view that the latent growth of Peruvian cacao lay with small collective organisations and the technical and monetary barriers associated with organic certification, set a strong rationale for Cacao International to intervene in its suppliers' affairs. Eduardo stated that if collective organisations required support in meeting their obligations, then they had to enter into agreements with PeruCacao that meant PeruCacao had control over the way they participated. Therefore while organic certification did not directly correspond with social capital formation, it was a catalyst for implementing governance over the chain by PeruCacao.

5.5.3 Risk of Supplier Failure and Buyer Support

The risk of suppliers failing to meet the competencies necessary to compete in a GVC is a dimension of governance because, when combined with standards such as those posed by certification, it affects the propensity of buyers to govern the GVC (Gereffi *et al.* 2005). One aspect of this is the notion of 'upgrading', defined as the acquisition of new capabilities to access new markets for suppliers (Humphrey and Schmitz, 2004). It is widely stated in the GVC literature that upgrading is facilitated in governed GVCs compared to spot-markets where governance is absent (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007).

This section drills deeper into this topic by describing the nature of PeruCacao's support to upgrade its supply base through its NGO support arm HelpCacao and the role of the wider institutional environment. The insights on the upgrading journey followed by Collective Cacao, Bean Committee and PeruCacao's supply base more broadly (the latter being captured through

interviews with PeruCacao and HelpCacao) creates a basis for understanding how this particular dimension of governance plays a role in social capital formation of farmers.

As noted in the previous section, a significant barrier for case study cooperatives in gaining organic certification was the cost of certification itself which neither collective organisation could pay for individually, indicating that supplier capabilities, in this case financial, were not up to the level that PeruCacao and Cacao International required for its GVC:

"The decision to become organic was made by the directive a long time ago but they never really got into it because of the costs. They had a plan for every farmer to put in some money, but it never really worked. PeruCacao told them they can get some funds for that. So it was their idea, but PeruCacao were the ones who made it possible." (Field Translation: Emilio, Technical Coordinator, Cacao Collective)

In exchange for exclusively supplying PeruCacao, cooperatives receive financial and technical support to *product upgrade*, in that they are moving into products which have a greater value per unit, from conventional to organic cacao (Humphrey and Schmitz, 2002). The secondary data supports this high price of organic cacao compared to conventional cacao (ICCO, 2013). The dynamic of a buyer supporting the product upgrading of suppliers, especially in a traditional agricultural sector such as cacao, is reflected in other findings in the literature (Pietrobelli and Rabellotti, 2011).

To upgrade suppliers' products from conventional to organic cacao, PeruCacao employs its own team of 15 technicians to support its supply base of 10 collective organisations. Alongside this, HelpCacao represents an important mechanism by which PeruCacao upgrades its supply base. By creating HelpCacao, Cacao International has been able to capitalise on a uniquely rich institutional environment in Peru to draw external support from, while at the same time having more control over the implementation process:

"We could live without HelpCacao, it's not absolutely vital, but we live better with HelpCacao because we would have to work with other NGOs to implement projects... We live in an environment where there are probably too many projects available and everybody is benefitting from them... it would be a competitive disadvantage to not work with these kind of projects. It's

different in Peru compared to other countries. I do not know another country which has so many programs" (Steven, Owner, Cacao International)

PeruCacao is able to *directly* tap into projects from international development agencies such as USAID and national government agencies like the national drug control commission of Peru (DEVIDA) through HelpCacao. This model of buyers creating an NGO to become a dedicated support arm reached beyond the PeruCacao GVC. Interviews with other NGOs stakeholders outside of the case study GVC revealed that another large cacao importer in Peru (3rd largest cacao supplier in the world) has a similar model in Peru, with a subsidiary exporter and an NGO dedicated to upgrading a supply base of small collective organisations alongside a second supply channel composed of cacao cooperatives capable of direct exportation. Interestingly, interviews with the largest cacao cooperative in Peru revealed that a department and a team of five employees within the cooperative is dedicated to funnelling projects from the wider institutional support provided by ADP. Steven suggested that the projects available in Peru meant that to not utilise these effectively would be "a competitive disadvantage". All of the evidence indicated that the investment required to set up and run a private NGO to govern the chain (and in the case of the largest cacao cooperative, a dedicated department) was justified by the importance that the institutional environment has to cacao in Peru.

Continuing this point on the interaction between the institutional environment and governance, an important role that PeruCacao plays is that of a *facilitator* of institutional support for its supply base. Without PeruCacao as a partner, much of the support that the institutional context has to offer would otherwise be out of reach for these small cooperatives. Using the example of a project called 'Agroideas', the President of Bean Committee explained:

"Another benefit [of partnering with PeruCacao] is that we are currently working in a project with Agroideas... in this project we are focusing on fertilisation and also a drip irrigation system for the farmers... that is precisely an example of what we are working on with PeruCacao. At the moment we don't have a counterpart. Since we cannot afford a counterpart, PeruCacao is going to take on the counterpart so that we can refund it later." (Ordell, President, Bean Committee).

Likewise the project with a Swiss development organisation that Cacao Collective was involved in was entirely facilitated by its relationship with HelpCacao and PeruCacao. This notion of buyers being facilitators to the external institutional environment was reinforced from an interview with

an NGO representative who indicated that the preference of his organisation was to support collective farmers that had existing relationships with buyers because they already had a secure export market. This suggests that, in the present case study, not only do buyers bring institutional support from the external environment, but the propensity of NGOs to offer their support can also be shaped by the existence of buyers, indicating both a pull and push dynamic between the GVC and the institutional environment.

How governance in the PeruCacao GVC operates appears to be very much informed by the ADP context in terms of the incentives provided by international development agencies and the government of Peru for buyers to develop their supply base. This has theoretical implications for governance and represents a contribution of the present case study. Contrary to the idea that GVC governance is 'de-linked' and 'autonomised' from the institutional context (Gibbon, 2001, Petkova, 2006); the present case study presents a clear interaction between the institutional environment and governance.

Through a co-investment with the Swiss development organisation, HelpCacao provided support through the provision of technicians. In Cacao Collective, three technicians were in place at the time of the fieldwork, with two being responsible for technical aspects such as improving yields and meeting certification standards while the third was responsible for the social organisation of the cooperative as well as supporting technical aspects too. Through the same project, Bean Committee was provided with one social technician. While the technical development of PeruCacao's supply base was obviously critical to meeting certification standards, the social organisation of collective organisations were identified as a particular area for improvement in the PeruCacao GVC:

"All the cooperatives are working on this part, the social part, because I think the commercial aspect is easy, easier than the social aspect" (Dina, Administrator, HelpCacao)

This change was catalysed by the buyer through its partial funding of and facilitation of support for the social technician. The social technician had also put in place more stringent accounting mechanisms. The data suggested that the social technician played a role in managing and improving the performance of collective organisations:

"My role is two-fold, social and production. The social side is to make sure members of the directive are fulfilling their roles, implementing their strategy to increase the number of members who are contributing, both their monthly contributions as well as the grains quota. I have to check that they have been certified in some way, the number of certifications, anything to do with payments, controls; that the directive is working well, meetings, strengthening the organisation" (Fabián, Social Technician, Bean Committee).

The findings suggest that structural social capital formation that evidently took place was enabled by the governance model, or more specifically the risk of supplier failure and the drive to upgrade, given that more effective rules and regulations were now being put in place. Another form of support that PeruCacao provided was to financially support the management of collective organisations to go to international agricultural fairs and meet European chocolatiers. This was considered as a way to expand the vision of the organisations' leaders who previously had not had the opportunity to visit the markets that they supply to, as well as driving home the importance of quality in the PeruCacao GVC:

"They go to know more about how the market is, how the organic cacao market is working, to open a vision because they are small cooperatives and in some case they don't know what happens in the international market. They don't have many opportunities to go abroad... also they went to visit some chocolatier enterprises to know how the cacao beans are working, to prepare good chocolate. From this point we want the farmer to know how important it is to make quality in the field" (Dina, Administrator, HelpCacao)

This notion of suppliers 'learning' from governed GVC relationships is supported by the literature (Pietrobelli and Rabellotti, 2011). In conjunction with the Swiss development project, PeruCacao also paid for an accountant and a manager to be employed at Bean Committee to help organise the finances of the organisation. All the evidence captured in the interviews point towards very explicit involvement by PeruCacao in its suppliers' business operation. This kind of support and direct involvement from a buyer indicates a high degree of governance indicative of a quasi-hierarchical GVC. However this could also be linked to the development of structural social capital in the form of more effective leadership. To bring suppliers up to the standard required to compete in a high quality, organic cacao GVC, PeruCacao saw the need to improve the leadership

and organisational capabilities of collective organisations — as Eduardo noted: "If there is no transparency and there are bad people working in the cooperative, the beans will be bad".

According to the administrator of HelpCacao, collective organisations in the PeruCacao GVC that had successfully improved their capabilities were those where the members: 1) had been convinced that they should allow the directive to manage, rather than getting involved in that function of collective organisation; and 2) were willing to provide higher contributions to support the development of the collective organisations. These factors identified as important characteristics to upgrade are associated with dimensions of social capital in terms of the former manifest in effective roles for decision making and the latter reflected in the propensity to contribute towards mutually beneficial collective action (Uphoff and Wijayaratna, 2000).

The wider push to upgrade suppliers by PeruCacao ultimately led to the development of structural social capital. New processes had been implemented, namely by the social technicians and personnel funded by PeruCacao and its supporting institutional actors, which gave greater accountability within Cacao Collective and Bean Committee. The control cards described previously were initiated by the social technician and the accountant and manager employed by Bean Committee were both dependent on support by PeruCacao. In this respect, governance is very much an enabler of structural social capital. However the relationship with cognitive social capital was more complex due to its deep entrenchment in the historical and cultural context.

Historically, the terrorist activities of the Shining Path group which engulfed the country in the 1990's-2000's created deep mistrust among farmers in the Amazonian. This was revealed in several stakeholder interviews and correspond with Dina's observation between PeruCacao's suppliers in San Martin (Andean region) compared to those in Cusco (Southern Amazonian). In our case study, these factors had repercussions on the ability of PeruCacao to develop cognitive social capital of suppliers in its GVC. Culture and history either enabled cognitive social capital formation and organisations were open to workshops, or were barriers to cognitive social capital formation in terms of an unwillingness to participate in workshops and entrenchment in current social norms.

There was evidence that the rise in structural social capital (as described in section 5.3) could be attributed to the upgrading process to bring suppliers from conventional to organic cacao, indicating that this particular dimension of governance is an enabler of structural social capital.

However there was no evidence to indicate that cognitive social capital was enabled in the upgrading process, despite workshops being set up to teach farmers the importance of solidarity and trust. The interview with Dina suggested that this was a result of social capital being deeply entrenched in culture and history. This corresponds with the wider findings laid out on cognitive social capital

Farmers in a quasi-hierarchical structured GVC go on to build better products in a more efficient manner compared to those who operate in a market governance structure (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007). In this case study on a cacao GVC, this holds true. In the past, Cacao Collective grew conventional cacao with limited technical support, but after integrating into the PeruCacao GVC the organisation had acquired UTZ certification, was on the threshold of selling organic certified cacao and had technicians dedicated to improving the productivity of the organisation. Likewise since integrating into the PeruCacao GVC, Bean Committee acquired UTZ certification, was in the early stages of organic conversion and had also been provided with technical assistance. Social capital was a clear means to this end. Through the social technician implementing new rules and regimes, to workshops teaching "farmers how to be in a cooperative", a concerted effort was in place to drive both structural and cognitive social capital. The incentive for PeruCacao to invest in social capital corresponds with the notion that social capital is an important factor in farmers meeting certification standards in GVCs (Asfaw et al., 2009, Melo and Wolf, 2007).

5.5.4 Information Flow

Information flow along the value chain represents a dimension of governance because as the knowledge required to carry out a particular process becomes more complex and necessitates face-to-face communication, governance over the chain intensifies (Gereffi et al. 2005). There was evidence from interviews to suggest that that communication channels between PeruCacao and the case study collective organisations were open. Both Cacao Collective and Bean Committee stated that they use the internet and regular telephone calls to communicate with PeruCacao, although poor connectivity to the internet was highlighted as an issue by the technical coordinator of Cacao Collective. PeruCacao also had representatives in all of the regions where its suppliers operate which gave the collective organisations a point of contact. Interviews with the President of Bean Committee indicated that he had regular communication with the representative from PeruCacao:

"Dina is our coordinator in this Region. So she takes care of (the contact with PeruCacao); so anything we need, we mention it to Dina and she gets in touch with them... Sometimes we talk once in a month or maybe every two weeks, depends on whether there is something we need to discuss, she would call me or I will call her... so we communicate often" (Ordell, President, Bean Committee)

In addition to regional representatives, the manager of PeruCacao - Eduardo, visited suppliers three to five times a year. From the interview with Eduardo, there was a clear sense that coming out and meeting suppliers face-to-face was regarded as important to the overall business relationship: "it's important that they see me and I see them". In these meetings, Eduardo would hold a dinner with members of collective organisations' members and discuss strategy. At the time of the fieldwork, Steven had arrived from Switzerland and was visiting individual collective organisations. Given that Cacao International sourced cacao from around the world both from small and large collective organisations, the owner of Cacao International coming to Peru to meet suppliers showed how importance face-to-face interaction was viewed.

While the evidence showed that the information flow was strong between PeruCacao and the leaders of Cacao Collective and Bean Committee; some interviews with members of the case study collective organisations presented a contrasting view, suggesting either they did not know much information about PeruCacao or felt that they did not have access to the information they desired, leading in some cases to a breakdown in trust:

"PeruCacao is a company that is purchasing products, no? I am not really aware of more than that. When we have meetings they explain to us that PeruCacao is purchasing but more than that I don't know" (Farmer, Cacao Collective)

"We have been with them for three years. They never say how much they earn, or how much the production is. You never know how much you will have in your pocket." (Farmer B, Cacao Collective)

"PeruCacao don't tell us how much they sell it for... The technical coordinator tells us [the directive] not to get involved in what isn't our business" (Dario, President, Cacao Collective)

It is important to note that this negative view of PeruCacao was not shared by all farmers that were interviewed. While there was evidence that some farmers felt they did not have the necessary information about the exporter, representatives from PeruCacao had come to the group to explain how the price was calculated from the world market price and this had helped some members to understand why the price had fallen over recent years:

"They work with the price given by the stock exchange.... I don't think they are cheating me. After all they come and buy from us according to the price given by the stock exchange... the European market" (Farmer, Cacao Collective)

"Of course sometimes there are high and low prices, but they tell us the reasons why they pay less when we complain." (Farmer, Bean Committee)

"They [PeruCacao] inform about the price. Last year, I can't remember which country but somewhere like Switzerland, where a lot of cacao was being sent, they had a slow production so a lower price... I understood what PeruCacao was doing. Information is important, otherwise us farmers fight over price, so it's good to know." [Farmer, Bean Committee]

Indeed the fall in global market prices referred to above is corroborated by secondary data (ICCO, 2013). The evidence suggested that when information was not disseminated beyond the relationship between managers and PeruCacao, then cognitive social capital formation suffered because it represented an issue that drove conflict among members. However when information was shared to the wider organisational level – in this case how the selling price was determined by global market prices for cacao, farmers were more understanding of the situation which the interviews suggested led to a more cohesive organisation. The takeaway message is that cognitive social capital in case study collective organisations is more likely to develop where information flow from the buyer and seller is inclusive of group members.

5.5.5 Relationships and Trust

It is widely understood in the literature that relationships and the nature of trust along the value chain are important mechanisms of governance in GVCs (Bolwig et al., 2010, Gereffi, 1994, Frederick and Gereffi, 2009, Morrow et al., 2004, Kaplinsky and Morris, 2002). More specifically, long-term relationships where a high degree of inter-firm trust exists enables governance to function because it deters against the kind of opportunism that characterises arms-length market relationships (Sako and Helper, 1998, Kaplinsky and Morris, 2002, Riisgaard et al., 2010). In the present case study, while there was data showing that the relationship between the two collective organisations and PeruCacao was strong, the findings reflected that of the information flow whereby relationships were strongest at the personal level rather than organisational level and in fact from the perspective of some farmers, the relationship did not represent a 'win-win' situation.

To understand the type of governance, it is valuable to look at the structure of relationships in the GVC. If there are few buyers with a large number of suppliers, then this typically points towards a quasi-hierarchical GVC structure because the buyer has a significant degree of power over its supply base whereas in a network governance structure, there is limited dominance of the buyer over the supplier because power is more evenly distributed (Humphrey and Schmitz 2002). In the PeruCacao GVC, the structure of relationships pointed towards quasi-hierarchical governance because Cacao Collective was the one and only buyer (due to exclusive supply contracts) for a number of cooperatives, including Cacao Collective and Bean Committee. Figure 10 displays the likeness between the PeruCacao GVC and quasi-hierarchy compared to other types of governance.

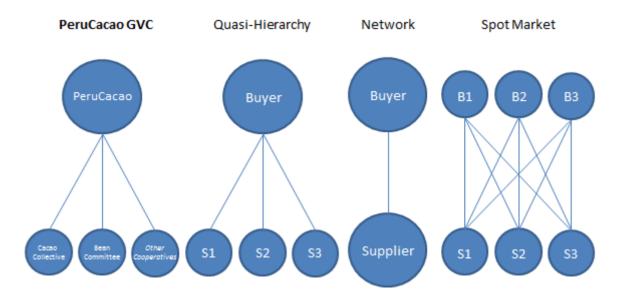


Figure 10: Quasi-hierarchical governance structure of the PalmPeru GVC

There was strong evidence to suggest that PeruCacao regarded its relationships with suppliers to be important to its own success, reflecting a justification for governance (Frederick and Gereffi, 2009). Eduardo noted that there was a level of interdependency between PeruCacao and its supply base and this notion was supported by Steven who linked strength of supply chain relationships with the notion of a sustainable business:

"If they are good, we are good. If they are bad, we are bad" (Eduardo, General Manager, PeruCacao)

"What I personally believe in is win-win situations. You can only have a sustainable business if your suppliers are happy with the way you behave and vice versa... Trust is a big issue and friendship at the end. Long lasting relations is what we are looking for" (Steven, Owner, Cacao International)

Relationships based on mutual dependence are a fundamental element of governance because it reduces the threat of opportunism where high switching costs exist (Humphrey and Schmitz, 2002). The cost of opportunism to PeruCacao was high due to the level of asset specific investment in supporting the certification of its suppliers. If after the end of the three year exclusivity contract, collective organisations made the decision to not continue supplying cacao to PeruCacao, then its investments into its suppliers would be lost since those developed capabilities would then be capitalised on by other buyers. This confirmed the role that value chain

relationships have as a mechanism of governance, especially with regard to creating 'win- win' situations that enable structured governance models to work without the threat of opportunism (Frederick and Gereffi, 2009). Consistent with a GVC perspective on governance, the introduction of standards (certification) and a risk of supplier failure that necessitates buyer support have strengthened the vertical aspects of the chain towards a quasi-hierarchical governance structure (Gereffi et al. 2005). Based on investment by PeruCacao developing suppliers' competencies to meet certification, there was a strong sense of ownership over the certification itself, even though it is an investment in a different function to that of its own as an exporter:

"Certification has a cost. Who is going to pay for that certification?... If I invest in certification, it's my certification" (Eduardo, General Manager, PeruCacao)

The supply contracts that collective organisations signed were a deliberative effort by PeruCacao to capture suppliers because of its investments into its supply base, reflected in Eduardo's sense of ownership over his suppliers' certification: "It's my certification". This arrangement is characteristic of a quasi-hierarchical governance structure where a buyer protects itself from opportunistic behaviour (Gereff et al. 2005). Since entering into this relationship with PeruCacao, the social capital of collective organisations changed significantly.

The institutional environment was the driving force for the creation of Cacao Collective in 2000 through the incentives provided by Winrow. Despite this, membership numbers between 2000 to 2008 experienced timid growth. The exclusivity contract between Cacao Collective and PeruCacao in 2009, thereby the entering into a highly governed GVC rather than a market-based one, led to a large increase in Cacao Collective associational membership. Between 2009 and 2011, membership rose 344% from 52 to 231 and, according to Eduardo, the output of cacao rose from 15 to 250 metric tonnes per annum within three years. Taking associational members as a proxy of structural social and, despite 'unproductive' associational membership growth initially, increases from 2009 onwards were supported by qualitative improvements in structural social capital; it would suggest an association between governance and structural social capital.

There was also evidence to suggest a more direct link between the GVC relationship and structural social capital:

"People from PeruCacao, they also told me that unless the association was managed in a coherent way, they would stop working with us" (Emilio, Technical Coordinator, Cacao Collective).

"PeruCacao wants to work with them, but the problems, they need to be solved. PeruCacao is not a charity... there is only some much we can do" (Dina, Administrator, HelpCacao)

The theme was also supported by the interview with Eduardo, the manager of PeruCacao, who recited an instance where a collective organisation had failed to improve its management capacity and subsequently PeruCacao ended the contract and broke off the relationship. The findings suggested that it was not just through upgrading that structural social capital grew, but also the way that PeruCacao wielded its power in the relationship preceded the formation of structural social capital. If suppliers did not change their internal governing structures — or in other words their structural social capital, then there was the real threat that the upgrading process that PeruCacao invested in would come to an end.

While there was the acknowledgement that trust was important to the functioning of the chain, there was a clear separation in the trust that was placed in Emilio than with Cacao Collective as a whole, as the administrator of HelpCacao stated: "PeruCacao trusts in Emilio more than the Cacao Collective association". Emilio confirmed this to be the case:

"I am a person that has direct contact with PeruCacao... in 2012, I started to build a direct relation with PeruCacao, in particular with regards to the business partnership. They trust me because I have always fulfilled my commitments... I gained their confidence by the way I managed the funds they gave us" (Emilio, Technical Coordinator, Cacao Collective)

It was perceived by PeruCacao that the technical coordinator was implementing the correct procedures which had failed in the past, especially in terms of improving the financial position of Cacao Collective by stopping the advancement of credit to farmers until previous credit had been paid back. There was also evidence that the President of Bean Committee had a historically stronger relationship with PeruCacao than other members and Coyotl, the manager of Bean Committee, considered PeruCacao to be "a commercial ally, more than being a buyer or a seller", suggesting that the relationship between the leadership was strong. Interviews with members of

the directive revealed that from their perspective, the contract with PeruCacao represented a long-term commitment based on the support that they had received:

"Members must understand that we have a contract with PeruCacao ... that binds the relationship between PeruCacao and Cacao Collective" (Dario, President, Cacao Collective)

"We won't change buyer... no no no... especially with the certification coming up they are a great help and I don't think that would happen... if anything we would be not be getting rid of them, we would be opening more branches with them" (Emilio, Technical Coordinator, Cacao Collective)

"PeruCacao support us. We need that... we are in an alliance" (Eva, Treasurer, Bean Committee)

"It [the relationship with PeruCacao] has allowed us to grow, from not having anything at all at the beginning, the only one that helped us when we had no commercial ties at all... It has given us support for our own growth. So for us, it is a commercial ally, more than being a buyer or a seller... We have a solid working relationship, from both sides. They help us with the development of the organisation" (Coyotl, Manager, Bean Committee)

Although PeruCacao provided its suppliers with support to upgrade which, from the perspective of the managers from Cacao Collective and Bean Committee, brought value to the relationship; several farmers we interviewed were unhappy with the dependency on PeruCacao as a sole buyer of its cacao and this had repercussions on the cognitive social capital within collective organisations:

"I'd like to be a direct exporter ... not through an intermediary... we are unhappy we just aren't being told the price that PeruCacao sells for. So I say we are discontent now... PeruCacao don't think we are important so they don't tell us anything." (Farmer, Cacao Collective)

"We are being paid less with intermediaries. Farmers here, we sell to the cooperative, and the cooperative sells to the exporter and if we could sell directly, it would be better, instead of selling and selling to different organisations." (Farmer Group Interview, Cacao Collective)

"We want to look for a buyer so we can sell directly... [Interviewer: Aren't you doing that already?]... Yes, but we would like to be more independent." [Farmer, Bean Committee]

"The biggest conflict between the directive and members is the price... The farmers blame the directive... the farmers just say: why don't you sell to another market... why do you stay with PeruCacao? They don't understand the reason" (Emilio, Technical Coordinator, Cacao Collective)

A buyer who makes significant investments naturally wishes to negate against other buyers from benefitting from those private investments and as a result, an exclusivity contract is a necessary component in the PeruCacao GVC to avoid opportunistic behaviour (Gereffi et al., 2005), as Eduardo stated: "If I invest in certification, it's my certification". This ultimately entails a high degree of dependency on the buyer and asymmetric power and information exchanges. The findings showed that many farmers interviewed were not content being in a captive relationship with an intermediary that has significant power and information advantages over it, especially when the subject of price arose, yet these characteristics are coherent with a quasi-hierarchical structure as a means for buyers to ensure that their asset specific investments are not capitalised on by others (Humphrey and Schmitz, 2004).

A captured relationship had consequences for cognitive social capital. Conflict arose between managers who regarded the relationship with PeruCacao to be integral to the development of their organisations, desiring a long-term buyer-supplier relationship, and some farmers and other members of the directive who desired to either sell to other buyers (therefore shifting back to a spot-market mechanism and opting out of governance all together) or functionally upgrade and become a direct exporter. Clearly from the perspective of some farmers, the nature of the relationship with PeruCacao was one that felt subservient with a high degree of mistrust and lacking a 'win-win' condition. This instilled an area of conflict within collective organisations because there were fundamental disagreements over direction in terms of the future relationship with PeruCacao.

Section 5.5 laid out the main features of governance in the PeruCacao GVC and the role on social capital formation. Table 10 summarises these main findings.

Table 10: Summary of Case Study One findings on governance

Features of governance	Main findings
Standards	Organic certification represents the principal standard in the PeruCacao GVC. High technical and monetary barriers for Cacao Collective and Bean Committee. No evidence of a relationship between standards and social capital formation, however the strategic importance of organic certification to PeruCacao incentivises its governance over suppliers.
Risk of supplier failure and buyer	To negate against supplier failure, PeruCacao both invests in collective organisations and facilitates institutional funding through its private NGO, HelpCacao, to <i>product upgrade</i> suppliers. Social capital is an explicit part of this process, with a dedicated 'social technician' to "teach farmers how to be in a cooperative".
support	Evidence that features of structural social capital (defined roles for decision making and more effective rules and procedures) enabled by the upgrading process. However despite efforts to encourage cooperation among farmers through workshops, no evidence that cognitive social capital generated, with cultural and
Information flow	Evidence pointed towards regular information flow and face-to-face communication between PeruCacao, and Cacao Collective and Bean Committee's leadership. When information flow not accessible to farmers, mistrust grew in collective organisations; however farmers who felt they were receiving sufficient information from PeruCacao were more content with direction of collective organisation.
Relationships and trust	Strong, trusting relationships between PeruCacao, and Cacao Collective and Bean Committee's leadership, with recognition of inter-dependency and a 'win-win' situation. Relationship characteristic of a <i>captive governance</i> structure (Humphrey and Schmitz, 2004), reflected in exclusive supply contracts between PeruCacao and its suppliers.
	Since entering the exclusive relationship with PeruCacao, strong evidence of structural social capital formation. However a disconnect between attitudes of collective organisations' leadership and farmers, with strong commitment to the relationship by management but a desire of farmers to not be in a captured relationship with PeruCacao. The nature of the governing relationship identified as a source of conflict within collective organisations

This chapter outlined the main findings from the first case study, the PeruCacao GVC. The results show that while structural social capital increased within the context of a governed GVC, cognitive social capital did not and furthermore, showed signs for deterioration. The next chapter presents the main findings on the second case study – the PalmPeruGVC.

6 Main Findings: Case Study Two

6.1 Introduction

This chapter presents the main findings from the second case study – the PalmPeru GVC. Coming back to the research question that sets the focus of the case study:

How does the governance of a Global Value Chain shape the formation of social capital among farmers?

To review, the research question was deemed important to explore because there is: 1) a poor theoretical understanding of social capital formation despite an extensive account of the benefits that result from it (Staber, 2007); and 2) governance could be a factor on the cohesion of farmers (Neilson, 2008, Messner, 2004). The influence of governance is important because of its ever growing prominence in GVCs, especially in developing countries (Gereffi and Lee, 2012). Alongside cacao, palm fruit in Peru was deemed to be a well-placed product to address the research question because it represents an arena where there is a concerted effort to build social capital and a product where powerful buyers play a significant role in the GVC (UNODC, 2013, USAID, 2010).

In a similar fashion to the previous chapter, the present chapter is structured in the following manner: Context of Global Palm Oil Sector; Background of Organisations and Participants; Findings on Social Capital; and The Role of governance.

6.2 Context of the Global Palm Oil Sector

The growth of palm oil for consumption is not a new phenomenon. For thousands of years, it was grown in areas of Africa and production and export was dominated by Nigeria and Zaire in the first half of the 20th Century. However as continents adopted the palm fruit and oil production, Indonesia and Malaysia overtook Africa's producing countries and overwhelmingly dominate global production (Poku, 2002).

Palm oil is grown in tropical environments with high rainfall (Stickler et al., 2007) and consequently where these environments exist, palm oil is typically grown. The palm fruit has two main elements of value. The pulp (mesocarp) produces palm oil used in the food sector whereas the kernel which

produces kernel oil, very different from palm oil, is used for industrial purposes. The variety of the palm fruit which is used has a significant impact on its productive worth such that the traditional variety of the Dura has a much lower content of palm oil than its shell-less counterpart the Pisifera and the hybrid version of both called the Tenera (Poku, 2002). Interviews with stakeholders revealed that the hybrid variety, Tenera, was adopted by farmers in the present case study.

There is a diverse range of products that palm oil can be transformed into (figure 11), divided between food and non-food products (Hai, 2002). The Department for Environment, Food and Rural Affairs (DEFRA) (2011) note that 67% of palm oil imports for the UK market is for the purpose of the food sector and specifically for the production of biscuits, frying fats, snacks, confectionery and dairy, while another 23% goes into animal feed. The remaining 10% is for cleaning, personal care, cosmetics products and industrial uses. Of imported palm kernel meal, 80% is used for animal feed and the remaining 20% goes into electricity generation. The food and catering sector overwhelmingly dominates consumption of palm oil (DEFRA, 2011). In the PalmPeru GVC, the Peruvian manufacturer used palm oil and kernels for products ranging from domestic cooking oil and jarred sauces to animal feed. Global demand for edible oil has risen nine fold over the past four decades (Ismail, 2011). Relative to other crops, palm oil has a high value attached to it per unit (FAO, 2011).

The milling of the contents of the palm fruit into crude palm oil and kernel oil is typically done close to or on the farm to prevent the rise of rapid free fatty acids that have a negative impact on the quality of the oil (Hai, 2002). Preservation plays a key role in the palm oil GVC. The elimination of enzymes, micro-organisms and water, as well as effective storage and packaging, has a fundamental impact on the final quality of crude palm oil (Poku, 2002). Upstream producers are responsible for the cultivation of palm oil and production of Fresh Fruit Bunches (FFB) whereas further downstream is the milling of FFBs to generate crude palm oil and kernel, then further refinement of the palm oil and crushing of the kernels (Hai, 2002). In the present study, the Association for Palm Fruit Producers (APFP) — a collective group of palm fruit farmers, was responsible for production of FFBs and PalmPeru was responsible for the milling process.

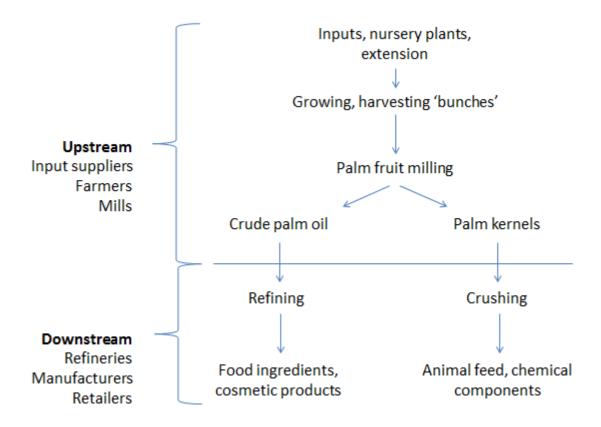


Figure 11: The Global Palm Oil Value Chain

Adapted: Wakker et al. (2005) and Geibler (2012)

Refinery of exported palm oil is typically located in countries close to the export market (DEFRA, 2011); however in the Peruvian context, refineries are located in-country and then the consumer products are consumed domestically or exported globally. In the PalmPeru GVC case study, the incountry refinery downstream from PalmPeru is the largest consumer goods manufacturer in Peru with operations across South America. However interviews revealed that there was a spot-market relationship between PalmPeru and the manufacturer, with no indication that the manufacturer interfered in suppliers' affairs and the suggestion that PalmPeru would begin selling to a wider range of refineries in the near future.

During the milling process, a number of activities are carried out, including sterilising the fruit, breaking apart the oil cells in the pulp (mesocarp), extraction and finally clarification and storage of the oil. The kernels are dried and stored for transportation. The process by which the above takes place can vary, from very traditional means where rudimentary machinery and a higher degree of labour are required (Poku, 2002), to more complex methods where the process is streamlined and mechanized (Hai, 2002). Unlike many other edible oil plants, small-scale milling of

palm fruit is viable because of its high oil content (56%) (Poku, 2002). In the PalmPeru GVC, since PalmPeru's creation, the process corresponded more with a sophisticated mechanized milling method with a dedicated factory rather than rudimentary machinery. However prior to the creation of PalmPeru, farmers in APFP had used these basic palm oil extraction methods.

For high yield production of palm oil, significant capital, technology and input investments are required whereas low yield farming is more associated with poorer smallholders who do not have the required capital to modernize plantations (Gutierrez-Velez et al., 2011). However compared to the rest of South America, and even leading producer countries in East Asia, Peru has a relatively high rate of yield for palm oil (Pacheco, 2012). It infers that, at least at the present moment, there is not a critical lack of capital in the capabilities of Peruvian farmers that inhibits the ability for high yield production at the national level, even though 60% of production in Peru is carried out by smallholders (Jeffreys, 2012). Based on the findings by USAID (2010), palm oil value chains in Peru are relatively sophisticated in terms of farmers' production capabilities due to the set-up investment provided through ADP.

Palm oil production in Peru is concentrated in two regions; San Martin and Ucayali, with the latter being where the PalmPeru GVC is located both in terms of farming and milling. In line with global figures, palm oil production in these two regions has grown dramatically, with almost no production at all in 1970 compared to nearly 200km² in 2010 (Gutierrez-Velez et al., 2011) and an annual growth rate of 3.4% between 2000-2010, compared to the annual growth rate for South America of 2.7% over the same period (FAO, 2011). However compared to Indonesia and Malaysia, and even regional producers such as Columbia, Ecuador and Brazil, Peru is still a relatively small producer of palm oil (Pacheco, 2012).

There has been a significant backlash against the palm oil industry with regard to the environmental impact production has in developing countries. Rapid expansion, particularly in Indonesia and Malaysia, has come at the expense of conserving land for forestry and green-house gas emissions (DEFRA, 2011) as well as soil erosion, water pollution and loss of critical habitats for endangered species (WWF, 2013). Although Indonesia and Malaysia have been the focus of environmental concerns, likely because these two countries dominate world production, the infringement of palm oil farming on the Peruvian Amazon does not escape similar criticisms. Gutierrez-Velez and colleagues (2011) note that between 2000-2010, 72% of new Peruvian palm oil plantations expanded into the Amazon Rainforest.

While there have been serious negative perceptions over the environmental impact of palm oil production, new sustainable initiatives have emerged as a way to counteract this. Roundtable for Sustainable Palm Oil (RSPO) accreditation has led to a growing uptake by importers for sustainable palm oil (DEFRA, 2011). RSPO certification was co-developed by the World Wildlife Fund (WWF) and private firms such as Unilever and Migros, and is a requirement set by some refineries and manufacturers of palm oil (RSPO, 2004). RSPO represents the most comprehensive multistakeholder initiative for the palm oil industry (Geibler, 2012) and has experienced growing adoption rates over recent years, although still only 12% of total global production is RSPO certified as of 2012 (RSPO, 2012). RSPO was not a certification adopted in the PalmPeru GVC, however interviews with stakeholders revealed that adoption was a goal of PalmPeru, supported by documentation shown to the researcher which showed that PalmPeru was looking to begin the RSPO application process.

Palm oil has become a critical part of Peru's rural economic development strategy. The Peruvian government has placed legal and tax incentives to promote production of palm oil (Gutierrez-Velez et al., 2011). As with cacao, palm oil is regarded as a clear alternative to coca production (the base plant for cocaine) and has been the focus for institutional support by outside organisations such as USAID (Jeffreys, 2012), the United Nations (United Nations, 2009) and a number of NGOs working with the sector as a whole (Hai, 2002). While there was no indication of specific NGO involvement in the PalmPeru GVC, the role of the United Nations and ADP was critical at the beginning. Both APFP (the association representing farmers' collective interest and supplier of PalmPeru) and PalmPeru (the miller and buyer of APFP) depended on the United Nations heavily during the embryonic stage of both organisations. Since then, both organisations had ceased receiving this institutional support due to the perception by the United Nations that the PalmPeru GVC was commercially sustainable which, as documentation from USAID suggested, it was.

Peru has the second largest forest area suitable for oil palm plantations among Amazonian countries (Stickler et al., 2007). Existing producers of palm oil such as Indonesia and Malaysia are considered as experiencing falling production capacity because of aggressive planting practices in the past, leading to a strategy of replanting rather than expansion (Hai, 2002). This has opened up opportunities for Peru given that there is significant potential for it to grow its own palm oil industry (Ismail, 2011). For major producing countries such as Malaysia, the collective organisational structure in the palm oil industry is relatively sophisticated with representative

organisations throughout the chain (Hai, 2002). Within the Peruvian milieu, ADP is trying to collectively organise palm fruit farmers in a similar way as a mechanism to deter coca production. This sets a strong rationale to investigate social capital formation within the context of governance.

6.3 Background of Organisations and Participants

6.3.1 Overview

An important element of data collection was to promise anonymity for participants as a means to encourage genuine contributions and insight during interviews. Therefore participants are provided with pseudonyms in the present chapter. Tables 11-12 presents an overview of the main participants and key informants involved in the data collection. Compared to the PeruCacao GVC, the PalmPeru GVC is vertically integrated with one mill and one palm fruit farmer association, which represents the governor and governed relationship (Figure 12). Therefore the variety of different organisations involved in the case study was limited, justifying a narrower analysis of the two principal organisations in the GVC – PalmPeru and APFP.

Table 11: Overview of Case Study Two main participants

Organisation	Name	Role	Main contribution
PalmPeru (Mill)	Diego	Senior technician	Governance/Social capital
Association of Palm Fruit	Pedro	President	Governance
Producers (Collective	Maria	Social Secretary	Governance/Social capital
Organisation)	Members	29 Farmers	Social capital

Table 12: Overview of Case Study Two key informants

Organisation	Name	Role	Main contribution
Palm oil stakeholder	Carlos	Chairman	Key informant - context
committee	Carlos	Chairman	key illioilliant - context
Independent	Andrea	Consultant	Key informant - context

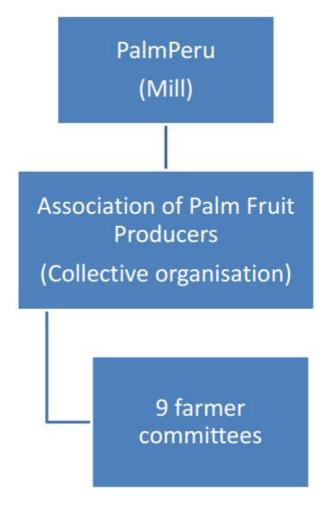


Figure 12: The PalmPeru Global Value Chain

The following sections go into the background of the main organisations and participants in the research. As with the previous case study chapter, key informants are not described as information collected from these were based on informal interviews and are not stakeholders within the case study.

6.3.2 The Palm Oil Mill – 'PalmPeru'

The senior technician of PalmPeru - Diego, who had insight on both the workings of PalmPeru and the social capital of farmers, was available and a longer and more in-depth interview was conducted. Diego has been with PalmPeru since 2003, working first as a technician and then, in 2010, taking the role of managing the technical support team of PalmPeru which consists of six engineers and 18 technicians.

PalmPeru was created through ADP in 1998 as a result of funding provided by the Government of Peru and the United Nations Office on Drugs and Crime (UNODC). Since 2002, PalmPeru has acted as an enterprise independent from outside institutional control, with USAID (2010) noting that the company is sustainable and would only need external assistance under exceptional circumstances. This notion was also reiterated by Deigo: "The United Nations supported us... but then we had the resources to support ourselves". The mill has experienced significant growth in its sales of crude palm oil since creation, from \$1.9 million in 2003 to over \$12 million in 2013 to become the largest palm oil mill in Peru. It currently sells 95% of all its palm oil to a large Peruvian food manufacturer that exports agri-food products globally, however the relationship was characterized as highly transactional with no evidence of buyer interference and therefore was not followed up as a unit of analysis during data collection.

Despite being an independent and legally separate company, a unique characteristic of PalmPeru is the degree of vertical integration it has with its supply base: its only supplier is APFP; farmer members of APFP are allowed to buy shares in PalmPeru and both organisations coordinate closely with one another, to the extent that their offices are located in the same building. This level of vertical integration is a result of PalmPeru's original founding as a dedicated milling function for APFP as conceived by ADP and the United Nations because of a lack of milling facilities in the Ucayali region:

"We did not have a factory or anything, we didn't have a place to sell the production, that was the first barrier we had. So the United Nations made it possible to create an extractive plant through the APFP management, and that is when PalmPeru was created." (Farmer, APFP)

The organisational structure of PalmPeru reflects that of a typical corporate organisation, with a manager, chairman and board of directors; however the notable difference is that the board includes representatives of APFP's members with a minority vote (49%) and the remaining majority vote (51%) held by APFP as the organisation. This sets the rather unique situation of farmers and executives of APFP holding different shares in PalmPeru. The level of vertical integration between APFP and PalmPeru creates the likelihood of explicit governance between the two organisations and the opportunity to explore the association with social capital formation.

The milling plant of PalmPeru has steadily grown its capacity to process palm fruit into crude palm oil, originally beginning with 6 TM/hr to 23 TM/hr at the time of data collection. However due to ever expanding areas of production coming from APFP, a second plant is currently being built by PalmPeru. Unlike its beginnings where the Government of Peru and the United Nations provided significant funding, PalmPeru as a company is now commercially independent from external support and has had to find its own avenues of finance to invest in this second plant.

6.3.3 Palm Fruit Association – 'Association of Palm Fruit Producers (APFP)'

Two senior stakeholders from APFP were interviewed as part of the research. Pedro has been the President of APFP for just over a month after being elected by the members (through their respective delegates) and prior to this he worked as a secretary when the association was first created. Pedro's principal role is to organise the nine committees of APFP and administrate the association's programmes. Maria is the social secretary and has been in this role for three years, although she has been working in the association for 10 years. As social secretary, Maria is the main contact between APFP and its farmer members. In addition to interviews with these senior stakeholders, individual interviews were conducted with farmers and two group interviews held across two different villages.

Located in Pucallpa (Figure 13), APFP was created in 1993 through the support of the United Nations and ADP as a means to move farmers away from coca to palm fruit production. Unlike cacao where land, seeds and basic tools represent the main set-up costs; the fixed costs of palm fruit are more significant and as a result the United Nations built nurseries and installed plantations during the initial set-up of APFP. The structure of the association in many ways reflects that of a cooperative, with two year terms for positions within the directive and an assembly of farmer members with a one member - one vote system. There are nine different 'farmer committees' that represent different districts where members are based, each with an elected delegate who votes on behalf of their respective village.

Where APFP departs from a cooperative is the decision making process. While farmers are able to vote for members of the directive, members do not vote for significant decisions; rather the directive, once elected, is able to make executive decisions concerning the association's affairs. This issue is tackled in more detail later in the chapter due to its implications for social capital.

All the farmers that were interviewed hired permanent farm workers, ranging from 4-10. In addition, farmers typically owned between 4-20 hectares of palm fruit and although some grew other crops, these were minor in comparison to the planting of palm fruit and used for consumption rather than commercial purposes:

"Apart from palm, we cultivate tapioca, rice and banana for consumption, but not for sale because there is no price." (Farmer, APFP)

ADP uses palm fruit as a means to incentivise farmers away from coca production and the evidence in the case study suggested that this was the primary motivation for members interviewed in the research. Most of those interviewed had chosen to begin growing palm fruit because of its appeal as a legal crop with a more secure livelihood:

"We did that before, there were a lot of us cultivating coca, but we now have switched to a legal crop. We look to have a legal production, so we noticed some people were doing it and they were having results, perhaps not in large amounts but they would not worry about their livelihood like we did before." (Farmer, APFP)

"Palm farming has changed completely... the way we live in our village. For example, before most people grew coca. With coca farming we lived very disorganised; there was violence, lots of assaults, there was... I mean... People who made money would squander it buying silly things. It was a very disorganised way of living." (Farmer, APFP)

Prior to the creation of PalmPeru, the production of palm fruit in APFP was relatively unsophisticated. Most farmers typically either sold palm fruit to APFP which was then sold on the open market, or farmers used palm fruit for their own consumption; making low grade palm oil for cooking. However it was when the factory of PalmPeru was created that palm fruit became a more commercialized operation, with APFP supplying exclusively to PalmPeru and farmers transitioning palm fruit from self-consumption to a commercially lucrative product.

This section provided an overview of the main participants and their respective organisations in the PalmPeru GVC case study. The next section presents the main findings on social capital formation among farmers.



Figure 13: Geographical location of PalmPeru and APFP

Source: University of Colorado (2000)

PalmPeru and APFP

6.4 Main Findings on Social Capital

6.4.1 Introduction

The following section presents evidence of social capital of farmers in APFP in the PalmPeru GVC. As was identified in the literature, two dimensions of social capital are explored. Structural social capital is defined as the roles for decision making, rules, procedures and precedents that supports mutually beneficial collective action and cognitive social capital, defined as the norms, values, attitudes and beliefs that provides the propensity for cooperation and typically associated with trust and participation (Uphoff and Wijayaratna, 2000).

Social capital is embedded in social structures that can go beyond a direct unit of analysis (Grootaert and Narayan, 2004) and Peru has a deep heritage of 'Minga' farmer working groups (Munoz et al., 2007), thereby justifying the exploration of social capital at the village level. The previous chapter found no relationship between social capital at the village level and governance; however this chapter provides evidence that may suggest a link and therefore the main findings at the village level are also presented. 'Minga' – the 500 year old farmer working groups, have more in common with structural social capital due to its connection with rules, procedures and precedents whereas 'everyday' cooperation among farmers is discussed under 'Cognitive Social Capital' because of its informal nature.

6.4.2 Structural Social Capital

Most 'founding father' members of APFP noted the role the United Nations had in encouraging them to join the association. The initial creation of APFP and the wider development of palm fruit in the Ucayali region was enabled by financial support provided by the United Nations, reflecting the role of institutional support in territorial development and social capital highlighted in the literature (Lee et al., 2005, Bebbington et al., 2007, Abramovay et al., 2008, Chase, 2010, Marquardt et al., 2011, Bosworth and Willett, 2011). Taking associational membership growth as a proxy for measuring structural social capital (Adhikari and Goldey, 2010, Gotschi et al., 2009), the evidence showed that structural social capital grew for APFP after its initial creation. According to Pedro, the President of APFP, the association started in 1992 with 120 farmers and by 2000, this had grown to 250 members. However by 2005, membership had more than doubled over a period of five years to 550 members. Figure 14 shows the trajectory of membership growth in APDP between 1992-2013.

According to Pedro, the rise in membership of APFP occurred after the completion of PalmPeru's factory and with it, significant economic benefits that encouraged other farmers to join APFP:

"[The rise] was mainly because of the economic development. Everyone wanted to become a member of APFP." (Pedro, President, APFP)

The idea that the economic benefits to members incentivised others to join the association was also supported by a new member who joined after APFP's conception:

"The first palm growers received help from the UN. Well, the rest of us, that didn't take part on the first round, saw that the production was very good in this area and, that's why most of us joined." (Farmer, APFP)

The evidence from interviews indicated that as some farmers improved their economic position by joining APFP, neighbouring farmers who previously were not members were incentivised to join. The propensity of farmers to make similar decisions as their neighbours corresponds with Holloway and Lapar's (2007) concept of the *neighbourhood effect*, also described as a *correlation of behaviour*. This phenomenon emerged in interviews whereby associational membership created a network effect in the local area – in villages where interviews were conducted, nearly all palm fruit farmers in the local area were also members of APFP.

Furthermore, APFP had managed to experience associational membership growth that was sustainable in that there was no evidence to show this had been built on poor monitoring systems in place (i.e. members joining APFP who were not palm fruit growers). For farmers to be a member of APFP, they first had to register with their local village committee (or village 'base') as a palm fruit producer, in essence making sure that they were genuine palm fruit producers and were not free-riding to receive cheap fertilizers or credit.

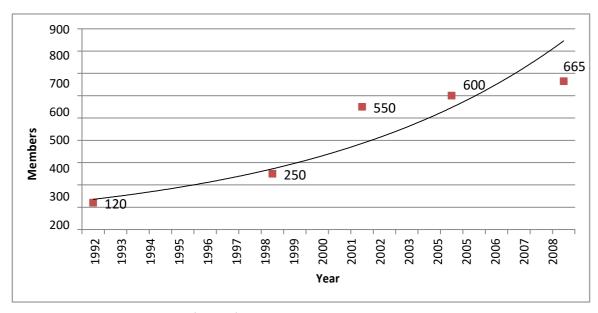


Figure 14: Membership growth of APFP, from 1992-2013

Source: APFP

As an association, the decision making structure of APFP differs to that of a cooperative. At APFP, members vote for a delegate in their respective village to represent them who then vote for members of the directive every two years. This directive has executive powers to make decisions that means other than during election periods, members have limited influence on the decision making process. Pedro, the President of APFP, described why this model was selected:

"At a cooperative everyone wants to govern. Everyone are owners and everyone wants to be in charge. There could be big groups wanting to do things, for example something economical, and another group might say no that it is bad and conflicts begin. Most cooperatives are going down because when it gets more power, groups of people rise and want to change things to benefit themselves not taking into mind the other members. This is why we are not a cooperative." (Pedro, President, APFP)

Likewise Diego, the Senior Technician at PalmPeru, mirrored the same sentiment:

"There would be too many people making decisions. In a cooperative, there may be 50 or 100 people making decisions... Decision making takes too long and there is a financial problem because the banks are happier to loan out money to businesses rather than to cooperatives... In

associations there are some people leading but the power comes from the members." (Diego, Senior Technician, PalmPeru)

Linking this with social capital, the above arguments put forward by Pedro and Diego reflect an argument for strong structural social capital in terms of clearly defined roles for decision making (Uphoff and Wijayaratna, 2000). This structure had been in place since APFP's beginnings – it was the only collective organisation structure that farmers had experienced.

The association had put in place individuals who were responsible for particular functions, from accountancy to the social dimensions such as voting. This 'professionalization' of the association had developed over recent years, contrasting with the early period after its creation where there were no specific functions or roles other than the senior management. The evidence suggests that for the particular dimension of defined roles for decision making, APFP had developed strong structural social capital. There was no indication in the case study of blurred responsibilities when it came to the decision making process. Leadership, closely associated with defined roles for decision making, was also an aspect that APFP sought to professionalise:

"In order to become APFP president, the first thing the rules ask for is to have led a group before.

That is one of the requirements to become an APFP president, if you don't fulfil these you cannot become one. You have to fulfil those leadership stages." (Farmer, Group Interview, APFP)

To become a leader of the association, individuals had to have been a successful president of a village committee, as one farmer noted: "Our leaders should know how to lead". Interviews with farmers provided no indication that the capabilities of APFP's leadership was under question. Leadership is an important aspect of forming social capital (Serra, 2011, Vollan, 2012, Goetz and Rupasingha, 2006, Krishna, 2004, Kaganzi et al., 2009) and the evidence indicated that this dimension of structural social capital was strong.

Another dimension of structural social capital is the role of rules, procedures and precedents in facilitating mutually beneficial collective action (Uphoff and Wijayaratna, 2000). The findings suggested that, in most part, APFP had effective rules, procedures and precedents; reflecting high structural social capital among farmers in the association. Assembly meetings — an

important arena to facilitate information sharing, learning and voting for delegates, was obligatory for members and for those that did not attend, a sanction was applied:

"In the assembly meetings you get informed of what is happening and what you can do as a member. The workshops are there for you to learn more about business and your business... It was through the assemblies that they inform us of these. In the workshops too they teach how to be responsible." (Farmer, APFP)

"You have to pay if you do not attend an assembly meeting. It varies, but you have to pay 20 or even 100 soles, depending on each base." (Carlos, Chairman, Palm Oil Stakeholder Committee)

"We need to vote [in assemblies], otherwise there is a sanction of 100 soles" (Farmer, Group Interview, APFP)

In addition, despite suggestions that some farmers cheated by side-selling, APFP had monitoring mechanisms in place to tackle the issue:

"We monitor farmers with the technicians and the delegates, although of course there is always someone who escapes us." (Maria, Social Secretary, APFP)

Building on this theme, APFP also had a contribution in place whereby payments to farmers were automatically discounted with their required contribution, thereby setting a precedent that normalised monetary support towards the collective goals of the association. The findings indicate that with respect to rules, procedures and precedents, including the role of sanctioning, all of which are important elements of structural social capital formation (Molinas, 1998, Woolcock, 1998, Uphoff and Wijayaratna, 2000), APFP has systems in place that reflect high structural social capital.

Social capital is embedded in wider social structures (Grootaert and Narayan, 2004) and as a result, an analysis of farmers at the associational level also justifies insight at the village level where farmers are situated. Working farmer groups in Peru are historically entrenched in the culture of Peru (Munoz et al., 2007) and participants identified 'Minga', farmer groups deep-

rooted from the Inca period, as a form of structural social capital because it reflects elements such as rules, roles, procedures and precedents (Uphoff and Wijayaratna, 2000).

As part of the data collection, 'founding fathers' of APFP were interviewed to understand the beginnings of the association. During the establishment of palm production and the creation of APFP, Minga was prevalent among farmers as a means to catalyse the initial set-up of palm fruit in the area. According to one member, this was because farmers at the time were unable to afford the extra labour required to work in the fields and therefore Minga was a means to overcome these constraints:

"[We did Minga] because there were not any workers who wanted to work, or some of them wanted to get more money that we can afford." (Farmer, APFP)

"We worked with Minga and that resulted in lower maintenance costs for every member." (Farmer, APFP)

This corresponds with the benefits of structural social capital in the literature, as manifest in the traditional practice of Minga, especially with regard to boosting productivity and incomes of poor farmers (Weijland, 1994, Schmitz and Nadvi, 1999, Uphoff and Wijayaratna, 2000, Vasilaky, 2013, Binam et al., 2004). This period of time when members participated in Minga was regarded by farmers as important to both the creation of APFP and the practical establishment of palm fruit in the area. The role of institutional support through the United Nations was an enabler in this process, specifically in terms of the provision of communal food which was perceived as a historically and culturally integral part of Minga:

"United Nations came here back then and helped us with food, and they used to send fish, sometimes rice and beans"... "Yes, that was the reality [confirmed by another farmer]." (Farmer, Group Interview, APFP)

"In the past it was beautiful to work because the engineers [from the United Nations] came here and brought food and brought the group together." (Farmer, APFP)

"We used to do group work, Mingas, they [the United Nations] facilitated handling for food, they facilitated that for us." (Farmer, APFP)

"This is how APFP started. We dealt with them and helped them out with giving them access to food and drink for the farmers." (Maria, Social Secretary, APFP).

The findings showed that communal food was critical to bringing farmers together to conduct Minga. The role of communal food as a cultural commodity and facilitator of structural social capital supports the findings in the literature on culture as a factor in social capital formation (Coleman, 1990, Akwabi-Ameyaw, 1997, Molyneux, 2002, Nilsson et al., 2012). Interestingly, it appeared from interviews with farmers that the United Nations had capitalised on the notion of food as a facilitator of structural social capital, manifest as Minga; pointing towards the role of institutional support in social capital (Khwaja, 2009, Grootaert and Narayan, 2004, Janssens, 2010, Vasilaky, 2013). The present case study indicates that when institutional support and culture are combined in a way where the former maximises the social value of the latter, it can be a powerful enabler of social capital formation.

According to Maria, APFP had continued to provide food to members as a means to bring them together to practise Minga. However interviews revealed that Minga as a practice had diminished in the villages of the members interviewed in recent years, despite it playing an important role when APFP was first created. The principal reason for this was that farmers no longer had the resource constraints evident when APFP had initially been created and farmers had since employed labour to work on the farms:

"Everyone has workers. The owner practically does not work and owners are not involved in Minga." (Farmer, APFP)

"[We don't practice Minga] because now there are a lot of workers and in the past there were less." (Farmer, APFP)

"Minga is not done now, but everyone looks after their own farm now and that does not allow every member to have an optimum cultivation in their farms." (Farmer, APFP)

"No, we don't [practise Minga], because everybody is now much better off. Their economic status has changed. Everybody has got their own tools. The majority [of farmers] have their own permanent workers. We don't do Minga as we used to. We used to practise Minga in the good old times; we used to help each other." (Farmer, APFP)

"We used to do Minga before. We [now] have more of economic resources and every farmer has become independent." (Farmer, Group Interview, APFP)

"We used to do Minga a long time ago, we are modern now.... Since we have improved our economic situation, we can hire workers... We are bourgeois now and we don't do Minga." (Farmer, Group Interview, APFP)

"Every single person has their own tools. Before we mingled, but now we don't because we each have our own money." (Farmer, APFP)

As already noted, Minga was primarily used by farmers when APFP was first created because farmers had resource constraints that meant they were unable to pay for waged labour, therefore they were more dependent on the efficiency savings that Minga provided. However as farmers' economic position improved, particularly after PalmPeru was created and linked with APFP, farmers were less dependent on Minga to be economically sustainable. There was also a sense from interviews that Minga was now regarded as something that low class farmers practised, as one of the quotes reflects: "We are modern now... we are bourgeois". This was despite farmers stating that they would benefit if Minga was still practised because, although they had hired labour, the owners themselves still worked on the farm. Interestingly it transpired from one interview that although most farmers had stopped practising Minga, hired labour had adopted the practise such that a group of workers working in one field would help another group of workers in another, followed by reciprocation at a later time.

The evidence suggested that even though there were still perceived benefits to farmers in practising Minga, both from farmers' and APFP's perspective, there was a broad perception from interviewees that Minga was less culturally acceptable due to rising economic status of farmers. This was in spite of APFP trying to encourage members to practise Minga by providing food and

drink to the individual village committees. It is well understood in the literature that culture and historical embeddedness is a factor in social capital formation (Lyon, 2000, El-Said and Harrigan, 2009, Maclean, 2010, Woolcock, 1998, Coleman, 1990). In the present case study, the association between culture and structural social capital changed dramatically over a relatively short period of time — with members noting that these 500-year working groups drastically faded when PalmPeru was created in 1998 as farmers moved from self-consumption to being more "entrepreneurial" and "leader-like". There is a lack of research on the impact of market forces on social capital in the development literature (Kaganzi et al., 2009) and the present case study implies that the modernization of farmers was detrimental to the culture that previously sustained traditional forms of structural social capital.

As noted, traditional structures of social capital such as Minga had deteriorated over recent years. However what had emerged were new, modern forms of structural social capital; APFP football tournaments among palm fruit farmers of different village committees. These had the effect of building social relationships not just within villages but also between villages, thereby extending structural social capital across farmers from different locations. One farmer noted the benefit of linking with other palm fruit farmers from different villages, enabled by these sports tournaments:

"We learn how they work in their committee, work is different, climate, soils are different.

Production is also different... it is a useful experience... I don't have a reason to mistrust in them."

(Farmer, APFP)

The facilitation of these tournaments are discussed under the section addressing governance. However as several farmers noted, these tournaments were valuable in creating linkages between farmers across villages, relating to the notion of 'bridging social capital' in that social capital was not just built between similar farmers, but also farmers from different locations who would not otherwise have such a degree of interaction (Gittell and Vidal, 1998). There was also insight which showed how strong social capital at the village level (as opposed to inter-village level) enabled the sharing of practices:

"Sometimes some plagues and diseases show up. Or also how can we fight weed and maintenance, sometimes we have to use herbicides. Experience is also important, how they have applied it, things we share everyday here." (Farmer, APFP)

Evidence from interviews also suggested that this manifestation of structural social capital had led to farmers learning new behaviours and production techniques, reflecting the literature on the innovative effect of social capital (van Rijn et al., 2012) and especially in terms of its impact on the sharing of agricultural practises (Binam et al., 2004).

In summary, the main findings show that structural social capital was successfully formed among farmers in APFP. Table 13 summarises the findings. The next section presents the main findings for cognitive social capital among farmers in the PalmPeru GVC.

Table 13: Summary of Case Study Two findings on structural social capital

Features of structural social capital	Main findings
Associational membership	Membership of APFP has grown significantly and at an accelerated pace since its creation. Between 1992 and 2000, associational membership grew from 120 to 250, but from 2000 to 2013, membership rose to 665. While Serra (2011) argues that associational membership alone is insufficient as a proxy for social capital, the qualitative evidence supported the findings for associational membership.
Defined roles for leadership	Clearly defined roles for leadership exhibited. Directive has executive power to make decisions once elected, differing from a cooperative model. Responsibility for different functions of the association delegated to individuals and no evidence of blurred responsibilities when it came to decision making – both of which had developed overtime.
Effective rules, procedures and precedents	Rules, procedures and precedents congruent with high structural social capital. Members sanctioned when breaking rules and monitoring mechanisms in place. Contributions automatically discounted from farmers when selling their palm fruit such that contributing was now 'normalised'. While procedures and precedents were strong at the organisational level, 'Minga' at the village level had diminished despite its strong presence during the beginning of APFP's creation, with farmers employing wages labour and

regarding themselves as too "bourgeoisie" to partake anymore. However cross-village football tournaments among members of APFP facilitated cooperation and information sharing among farmers from different villages and backgrounds, enabling new behaviours and production techniques, suggesting that traditional forms of structural social capital had been replaced by new, modern forms.

6.4.3 Cognitive Social Capital

Cognitive social capital is defined as the norms, values, attitudes and beliefs that incline individuals to cooperate with one another (Uphoff and Wijayaratna, 2000). Unlike structural social capital that can be measured through observable processes and quantified through associational membership, cognitive social capital is associated with intangible dimensions such as trust and participation (Knack and Keefer, 1997, Reyes and Lensink, 2011, Botelho, 2013). This section presents the main findings on social capital in the research. While there was strong evidence of a rise in structural social capital at the organisational level, the evidence on cognitive social capital was more mixed and in some cases contradictory, with indications that the vertical decision making process in APFP alienated some farmers. Yet there was also evidence of a strong sense of duty and commitment by farmers to the association.

From the evidence on structural social capital, it was clear that APFP had processes in place that provided defined roles for decision making through the system of delegates and an executive directive. However while this aspect of structural social capital was strong, this corresponded with a barrier to cognitive social capital formation. There was a perception from some interviewees in the association that they were not receiving information effectively in this vertical structure and a perceived lack of independent decision making:

"I am not inside the directive, if I was named as first delegate, second delegate, representatives, or vice president and if we had a position then we would have vertical information. But we don't." (Farmer, APFP)

"For disagreements, with the directive sometimes not everybody is happy with it. In that case, there are some members that complain because they can't do a certain thing. They don't feel as independent anymore..." (Maria, Social Secretary, APFP)

The first quote reflected a sentiment among some farmers interviewed that information was not disseminating down from the executive level of APFP to its membership base due to separation of roles in the association. In addition, Maria noted that some farmers had felt that the decision making process within the organisation restricted the freedom of members to make their own decisions because of the stringent rules and regulations imposed on members. The findings in the case study indicate that there could be a conflict between rising structural social capital and cognitive social capital. While rules and roles for decision making were strong, farmers perceived a fall in participation. Continuing with this theme, there was also evidence from interviews that indicated the membership growth and continued 'professionalization' of the association had a negative relationship with the unity of the association:

"Because the organisation has grown throughout the years, we have lost effort as an organisation to keep ourselves united." (Farmer, APFP)

This contrasted with perceived participation in the association when it was first created:

"There were not any problems at the beginning, people were motivated to create an organisation from here, in which everyone could give their opinions and move forward." (Farmer, APFP)

Interviews with farmers suggested a change in members' participation over time. During the initial creation of APFP, norms and values reflected a high degree of collaboration, pointing towards high cognitive social capital. However according to farmers this had stunted as APFP grew and developed into a more professional organisation. As with findings on more defined decision making functions, the evidence indicates that as structural social capital grew, some farmers perceived that a sense of *unity* had been lost within the association, reflecting a fall in cognitive social capital (Uphoff and Wijayaratna, 2000).

One aspect that emerged was how younger members were less inclined to participate in the decision making process because they were more interested in moving away from farming to opportunities elsewhere. Indeed farmers that were interviewed commonly stated that a benefit of being with APFP was they now had the income to provide for a better education for their children. Diego laid out the principal problem:

"The younger members want something else. Their interests are different. Because of the rising economy, they [younger members] are leaving to go to the capital, in pursuit of an education and aren't coming back... nobody wants to be a part of the directive... They don't want to stay here... They can't complete a directive as there aren't enough members... They can make decisions but not everyone is participating towards making that decision. In a directive everyone should have an opinion and a say when deciding on something." (Diego, Senior Technician, PalmPeru)

This dynamic of farmers improving their economic position and, as a result, younger members looking for other opportunities suggests that when it came to social capital, APFP was a victim of its own success. APFP had grown into a successful collective organisation - indeed as UNODC documentation highlights, APFP registers the highest income per capita than any other sponsored collective organisation involved in ADP, including within the palm fruit sector. However as economic opportunities grew, the propensity to stay close to the association fell which reduced participation — an indicator of cognitive social capital (Knack and Keefer, 1997, Reyes and Lensink, 2011, Botelho, 2013). Huffman and Feridhanusetyawan (2007) and Miguel *et al.* (2006) hypothesise that rural-urban migration negatively impacts on social capital in rural areas because previous relationships weaken and evidence from the present case study suggests a similar situation.

Despite the finding that cognitive social capital had not developed as strongly over time as structural social capital, there was evidence that farmers' behaviour and attitudes were geared towards a sense of commitment to APFP. In particular, farmers presented a commitment to contributing to the association:

"If they would tell us to contribute more, we would do it." (Farmer, Group Interview A, APFP)

"We are not deterred [to contribute], it is just a duty we have to do." (Farmer, Group Interview A, APFP)

"Throughout the years we have been working, we have been allowed to grow. We began with 5 hectares, so we have been creating funds through savings from the payment [contributions] in order to buy more seed and keeps plantation growing... this has been done through the Directive." (Farmer, APFP)

"This discount [contribution] is for APFP. Some others investments help with that, technicians are paid with that money and other expenses. When plants have a disease, they can kill it with that money, along with social benefits for disease. That contribution is important, because diseases are controlled with that money." (Farmer, Group Interview, APFP)

When questioned on the topic of contributions, farmers exhibited a committed attitude. Some of those interviewed felt obligated to contribute to the organisation, regarding it as a 'duty' and were even accepting that they may need to contribute more if the association was to grow. In addition, farmers appeared to understand not just that they were obligated to contribute but why contributing was important, as the last farmer noted: "That contribution is important, because diseases are controlled with that money". The benefits of contributing were highly regarded by farmers, especially with respect to the medical services provided:

"We benefit by being united. Having more benefits, having more social support" (Group Interview, APFP)

"They also support people who are seriously sick, they cover medicine expenses." (Farmer, APFP)

"We do have benefits that are useful, especially when we have health problems, they give us a solution, a loan or a donation, and they try to solve our problems" (Farmer, APFP)

"Agrarian insurance, costs are taken in order to assure health through the organisation and through one and each of the medical stations located in all villages." (Carlos, Chairman, Palm Oil Stakeholder Committee)

In addition, there was a wider sense that being part of an association meant that farmers were no longer on their own which justified the contribution and the benefits that arose:

"Belonging to an organisation is the best you can have, because one can learn a lot, it is better than being by ourselves." (Group Interview, APFP)

Farmers interviewed were accepting of the contribution system and understood the collective value of it. Many farmers interviewed felt that having the association provided a support mechanism which meant they were no longer "by ourselves". When asked whether they would consider leaving the organisation, there was no desire to do so, arguing that an extreme event would have to happen such as the association going bankrupt. These perceptions are indicative of high social capital in that a desire to contribute reflects attitudes and behaviour that facilitates collective benefits (Uphoff and Wijayaratna, 2000).

Moving from the organisational level to the village level, interview data supported a notion of high cognitive social capital. While farmers had lost traditional forms of structural social capital as manifest in the diminished role of Minga, social relationships between farmers were strong and one reason for this was the prevalence of APFP members in villages:

"Everyone in my village is like one big family and with other people outside yes because we all grow nearly the same thing... we're all members." (Farmer, APFP)

"We all know each other. We are members [of APFP]. I know him. As mentioned, I lend him and some other day he will help me." (Group Interview, APFP)

Members join APFP not individually but through their respective palm fruit village committees, meaning that where there is a village committee there is also a concentration of APFP members within that village. Indeed due to the place of APFP as the dominant palm fruit association in the region, members noted that other palm fruit farmers in their villages were either members of APFP or not members of a collective organisation at all. Insight from interviews indicated that this prevalence of APFP members within palm fruit producing villages had the effect of building relationships at the village level because farmers become more familiar with each other. It is already well noted in the literature on the role of repeated interactions on social capital

formation (Lyon, 2000, Ostrom, 2000). The present case study suggests that cognitive social capital, reflected in the notion of members being "like one big family", was enabled by the strong presence of APFP at the village level because palm fruit farmers had existing relationships at the organisational level.

Looking at the relationship with culture, the interviews showed that this was a likely factor in social capital formation. Despite coming from a region that was located in the Amazonian, one farmer still identified farmers from the Andes as having a more 'unified' culture, corresponding with the literature on the prominence of Andean farmer cooperation in Peru (Maclean, 2010):

"Farmers from the Andes, they work more... They cooperate, they are more unified" (Farmer, APFP)

"The difference is very noticeable. The ones from the jungle are conformists. However in comparison to the ones from the jungle, from San Martin [Andes], they are very different....

From the Andes super, super farmers, very good because they always are striving for more."

(Maria, Social Secretary, APFP)

Culture is widely understood to be a factor in social capital formation (Coleman, 1990, Akwabi- Ameyaw, 1997, Molyneux, 2002, Nilsson et al., 2012). Interviews with farmers indicated that there was a perceived cultural difference between those farmers from the Andes and those from the Amazonian region, which translates into a different attitude and behaviour towards cooperation that relates back to cognitive social capital.

While the evidence on cognitive social capital was more mixed than that of structural social capital, there was compelling evidence to suggest that some aspects of social capital had formed through a strong sense of commitment and duty among farmers. Table 14 summarises the main findings on cognitive social capital.

Table 14: Summary of Case Study Two findings on cognitive social capital

Features of cognitive social capital	Main findings
Norms and values	The "unity" values of APFP had perceived to have diminished over time. At the beginning, norms and values reflected a high degree of collaboration but at the present, farmers felt that this unity had since been lost as APFP developed into a more professional organisation. Despite this, farmers still committed to APFP, especially in terms of an appreciation of collective action values and an understanding of the resulting mutual benefits. At the village level, norms and valued congruent with high social capital. Due to the concentration of APFP members in villages, farmers considered themselves to be "like one big family".
Attitudes and beliefs	Positive attitude towards contributions and commitment to the association. No evidence of contrasting attitudes or beliefs among farmers or with management. Sentiment of loyalty to APFP and general agreement over direction. However indication that younger farmers less likely to participate due to changing attitudes towards economic opportunities outside of farming. At the village level, evidence of a cooperation and repeated interactions among farmers.

6.5 Main Findings on Governance

6.5.1 Introduction

The previous sections laid out the qualitative evidence concerning social capital. This section presents the findings on governance. Governance is defined as the idea that buyers have authority and power relationships that shape the participation of suppliers in the chain (Gereffi, 1994, Humphrey and Schmitz, 2004). While social capital is understood to be a horizontal concept (Putnam, 1995) in that it is concerned with the relationships among farmers, governance is very much a vertical concept such that rather than the relationship among farmers, it is concerned with the relationship that farmers have with buyers (Bolwig et al., 2010). Based on the literature review, the findings on governance are structured around the following dimensions: Standards; Risk of Supplier Failure and Buyer Support; Information Flow and Relationships and Trust.

6.5.2 Standards

Evidence from the present case study showed that the principal standard PalmPeru required APFP to meet were specifications on appearance and quality; related to the "what" aspect of standard setting (Reardon and Farina, 2002). Farmers noted that the quality element was especially important when delivering products to APFP:

"We have to provide good quality... Harvest must be mature and delivery must be fresh."

(Farmer, APFP)

"There is quality control in the plant... related to the harvest, there must be a special ripening state." (Farmer, APFP)

Meeting these standards was important to farmers because PalmPeru disregarded palm fruit that was not of the required standard. The nature of palm fruit means that if the fruit is not ripe, then it will not release sufficient crude palm oil; however if it becomes too ripe then a rise of rapid free fatty acids has a significant negative impact on the quality and quantity of the oil (Hai, 2002). This was reflected in the standards set by PalmPeru as well as the quality control processes put in place. At PalmPeru's factory, a quality controller would check the palm fruit that farmers brought to sell and if the product did not meet the condition specification then PalmPeru would not buy farmers' palm fruit. One farmer described the process:

"What they [PalmPeru] ask for is that it should be picked in the right time, ripe, there must always be a release from the head of the palm, there must always be a release of 4 to 5 seed, so it is useful for oil... If not, they are rejected... There is a fruit controller while discharging, they select it and whatever ripe goes through and the rest is put aside [rejected]" (Farmer, APFP)

These quality standards were integral to the effective functioning of the chain because the optimum condition of picked palm fruit affected PalmPeru's ability to maximise crude palm oil extracted from the fruit – in essence driving quality of the palm fruit to increase the quantity of crude palm oil. As noted in the literature, buyers place parameters (i.e. standards) on farmers that shape how they participate in the GVC (Gereffi, 1994, Humphrey and Schmitz, 2004) and in the present case, farmers were obligated to meet these parameters if they were to sell their product to PalmPeru (as members of APFP, they were obligated to do so).

Very much linked with quality requirements was PalmPeru's desire to drive the "how much" aspect of farmers participation; also an aspect of standard setting within the governance framework (Humphrey and Schmitz, 2004). At the time of the data collection, PalmPeru was building a second factory to increase palm oil production and there was evidence to suggest that PalmPeru was driving for higher yields and the instalment of new acres in its supply base (a topic

discussed further in the next section). While there was no set quantity that individual members or APFP were obligated to produce for PalmPeru, it was implicit from interviews that there was a significant desire for more production from its factory expansion, investments in new seedling nurseries and Carlos noted that PalmPeru were "always looking to grow, be bigger".

Findings from the case study point towards a rationale for governance over the GVC, especially if farmers are unable to meet these requirements without external support (Gereffi *et al.* 2005). Indeed there is a large technical difference between unsophisticated and sophisticated palm oil production (Poku, 2002, Hai, 2002) and it was clear from interviews that both APFP and PalmPeru were driving for the latter: "We are trying to make them more business minded", as Diego noted. For the chain to function in a way that PalmPeru desired, in terms of the condition of palm fruit prior to the milling process and a broader desire to increase production, a certain degree of intervention would be needed if APFP was to go beyond its unsophisticated beginnings, from farmers previously producing for self-consumption towards what could be regarded as more commercially competitive supply base.

There was no evidence to suggest that standards had a direct relationship with social capital formation. However PalmPeru demanded a particular supplier competency to ensure that they as a business could grow and become more competitive, thereby setting a rationale for governing its supply base which reflects the governance model in the GVC literature (Gereffi *et al.* 2005, Humphrey and Schmitz 2004).

6.5.3 Risk of Supplier Failure and Buyer Support

The previous section outlined the role of standards in the PalmPeru GVC. The next step in the governance framework is to understand the risk of suppliers failing to meet these standards and consequently, the extent to which buyers must support suppliers so that the supply base has the competencies to effectively function in the GVC (Gereffi *et al.* 2005). This buyer support is often described as 'upgrading' in the literature and is defined as the acquisition of new capabilities to access lucrative markets (Humphrey and Schmitz, 2004). It is widely understood in the literature that governance facilitates upgrading (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007) — in large part because the fortunes of buyers and suppliers are intertwined which incentivises buyer support. This section presents the findings on the extent

that members of APFP were able to meet standards set by PalmPeru and the support PalmPeru provided for APFP to upgrade.

As already described, farmers were perceived to be unsophisticated in terms of palm production prior to the integration between APFP and PalmPeru – "primitives", as one farmer put it. This notion was supported by Carlos (Chairman of Palm Oil Stakeholder Committee) who noted that farmers in APFP would typically use ineffective fertilizer inputs and had limited technical knowledge of palm fruit production prior to integration. Before APFP became part of the PalmPeru GVC, the association sold to intermediary traders with little formal coordination between them, pointing towards a spot market-based structure that lacked a governance mechanism (Gereffi et al. 2005). However when PalmPeru was created and APFP integrated into the GVC, greater support was provided to farmers:

"When PalmPeru started, we not only bought the fruit but also gave technical assistance to the plantations." (Pedro, Senior Technician, PalmPeru)

PalmPeru instructed farmers on the type of fertilizer to be used as this was, in the eyes of Diego, the most effective means to maximise yield. One of the perceived benefits of being in the PalmPeru GVC according to a number of farmers was that PalmPeru subsidized fertilization inputs, ensuring that farmers used the type which was deemed by the technical team as the most effective. Indeed the data provided by the United Nations showed that fruit yields for APFP farmers had risen significantly since integrating with APFP, suggesting that the tight control over process may have been a contributing factor. Farmers were taught how to apply the fertilizer by PalmPeru technicians coming directly to the field:

"They [PalmPeru] give them financial aid to them in terms of fertilization." (Pedro, President, APFP)

"We have a special method, sometimes PalmPeru is in our farm, and we need to do a type of fertilization. They teach us... in order to produce palm well, we have to listen to their technicians... because we normally work, how can I say? Like primitives." (Farmer, APFP)

"Agronomist engineers and specialists in the field train us and they give talks" (Farmer, APFP)

The evidence showed that there was governance over the chain that went far beyond a spot-market structure since PalmPeru had control over the type of fertilizer that members of APFP used, thereby demonstrating a high degree of coordination in the chain (Humphrey and Schmitz, 2004). Furthermore the knowledge required to effectively apply fertilizers and the notion that, prior to PalmPeru's intervention, farmers had a "primitive" understanding of production techniques, indicated that there was a need for intervention if APFP was to meet the necessary requirements (Gereffi et al., 2001). While the United Nations were heavily involved during the set-up stage of APFP, there was no further institutional support provided because: a) it was deemed by the UNODC that the PalmPeru GVC was sustainable and therefore should not be buoyed by ADP; and b) Maria stated that local government support was unreliable due to the politicization of such support and its cyclical nature based on election years. This independence that APFP now experienced meant that its success, as well as the PalmPeru GVC more broadly, relied on PalmPeru's support.

In addition to training and subsidization of fertilizer inputs, PalmPeru also closely analysed and monitored farmers' crops. Pedro noted that PalmPeru provided technical workers who go and visit farmers on the field, which was backed up by Diego who described the process:

"We have periodic visits to the plantations to do inspections. This helps us do an evaluation on the farmer. This brings up matters of nutrition and fertilization. This effects the evaluation of the quality of the crops. We can then show the farmers how they have done with growing the crops and if anything has to be changed, what is wrong and what is should be like. The sanitary evaluations are once a month and the evaluation of the farmer is every 3 months." (Diego, Senior Technician, PalmPeru)

This notion was also supported by farmers, who noted that PalmPeru analysed farmers' soil and tightly controlled inputs in a way where the entire production process was overseen:

"They analyse everything... They tell you what to use but they also buy it for you." (Farmer, APFP)

The evidence suggested that PalmPeru explicitly shaped farmers' participation. Not only did the buyer provide training and subsidize fertilization, but PalmPeru also monitored and controlled the process by which farmers produced palm fruit. Indeed the notion of a buyer conducting

inspections, evaluating farmers and providing feedback points towards a very high level of control over a supplier. This level of control is indicative of a buyer who is concerned about the risk of supplier failure and reflects a high degree of governance over the chain (Humphrey and Schmitz, 2002, Pietrobelli and Rabellotti, 2011, Gereffi et al., 2005).

As noted, the findings strongly indicated that the production process at APFP was controlled and monitored by PalmPeru. Further establishing the notion that governance was key to the PalmPeru GVC, there was also evidence that showed that PalmPeru invested in APFP's capabilities. In particular, the broader aim to increase production as reflected in the construction of a second palm oil mill led to investment in subsidizing new palm oil nurseries and expanding crops of APFP members:

"They [PalmPeru] also invest in the installation of new saplings. So a sapling may cost 10 soles, so PalmPeru pays six soles of it and the farmer only puts in four" (Pedro, President, APFP)

"A good thing is that from the link between PalmPeru and APFP is a project called NASA. NASA is in charge of building palm seedlings nurseries so that we as farmers and members of the APFP can continue to expand farming in other areas." (Farmer H, APFP)

"This is the vision. To increase the areas for palm oil." (Maria, Social Secretary, APFP)

Interviews with farmers also demonstrated how important increasing quantity of palm fruit was considered by themselves, with many stating that a key benefit of being in partnership with PalmPeru was that their support enabled them to expand areas to grow palm fruit. This linked in with their broader strategic aim of PalmPeru; "always looking to grow and be bigger", as Carlos put it. What the evidence showed was that PalmPeru was actively seeking to process upgrade (Humphrey and Schmitz, 2002) - in that much of their support for APFP could be linked with the development of capabilities associated with the process of palm fruit production with the end goal of increasing crude palm oil output, whether that be through improving the quality of the palm fruit (thereby maximising extraction) or incentivizing the plantation of more palm fruit crops. Given the strong indications of governance over the chain, the case study corresponds with the literature on the link between governance and the propensity to upgrade suppliers (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007).

Further to process upgrading, the interviews also revealed a different type of upgrading whereby members of APFP were taught how to manage their own finances and become more entrepreneurial. A weakness identified by PalmPeru, as stated by Diego, was that some members of APFP would not be able to manage their own finances because although incomes had grown; farmers would have large unpaid debts to financial institutions. Instead of saving or investing incomes back into their field, some farmers purchased luxury items that they could not pay back. It was suggested by Carlos that this was a consequence of a "coca mindset", meaning that farmers had previously been embedded in a mentality of low investment, poor financial management and a lack of entrepreneurialism. To remedy what both Diego and a number of stakeholders at APFP considered as a risk of supplier failure, PalmPeru provided training:

"We want that our farmers become more leader-like and more competitive. To have a better economy." (Maria, Social Secretary, APFP)

"These workshops are from PalmPeru's own money and also they would like to provide more support in this part as the farmers don't know how to manage their own economy." (Pedro, President, APFP)

"It shows them how a business functions, the administration and financial operations...

The importance of work and of the organisation." (Diego, Senior Technician, PalmPeru)

What also emerged was that social capital was considered to be an area that needed to be supported. As previously noted, a serious concern of Diego's was the waning participation of members in the decision making process at APFP, as reflected in younger members lacking a desire to be part of the directive. This was because it impacted on the legitimacy of PalmPeru's actions – if it was perceived that members of APFP did not have enough say, then the decisions of PalmPeru that had consequences for APFP may not be regarded as justifiable. As a result, participation (and therefore social capital) was an asset from Diego's point of view:

"It is better [that farmers participate] so that we can not only get a claim that everyone agrees with the decision but also that we know where the directive is heading and what people's

opinions are... After training they will come back. Two years later ago there was training and now they participate more with decision making." (Diego, Senior Technician, PalmPeru)

The insight from Diego showed that through the workshops, farmers were participating more in APFP, especially younger farmers who were at risk of leaving the area and moving to the capital, Lima. This was corroborated by other interviewees that noted PalmPeru had indeed worked with APFP to boost bottom-up participation in the association, from the village committees to the directive:

"Workshops are important because they are run by professional people, and they teach us about many things. I mean, they teach us to cultivate palm and also the economical side of the business. Also in the social side... how to work in the organisations like committees or villages." (Farmer, APFP)

On a conceptual level, the findings suggest a complex relationship between governance, buyer support and social capital. Without participation, the PalmPeru felt that its governance over the chain would be less valid and therefore provided support to run workshops and teach farmers about how to work as a collective organisation, from the committee to the associational level. In part this could be regarded as a result of the vertical integration between APFP and PalmPeru in terms of the shareholder relationship between the two – "PalmPeru is APFP", as more than one farmer was quoted as saying. While it was well known in the literature that social capital is important for legitimizing local institutional models of governance (Brunori and Rossi, 2007, Bebbington et al., 2005), there is less known about the role of social capital in building buyer governance as defined in the GVC literature (Gereffi, 1994, Humphrey and Schmitz, 2004). The findings here indicate that, from the buyer's point of view, social capital was important in legitimising governance over the PalmPeru GVC.

Building on this notion that PalmPeru's intervention in APFP's affairs may have been associated with social capital formation among farmers, there was also evidence to suggest that not just participation within the decision making structure of APFP (indicative of structural social capital) was developed, but also cognitive social capital at the village level was also improved. Sport has a historical place in the social capital literature — Putnam's original work used bowling clubs in America as examples of social capital formation (Putnam, 1995). Interviews with farmers

revealed that PalmPeru, in conjunction with APFP, organised football tournaments among APFP village committees, as well as providing basketball hoops to farmers' children:

"PalmPeru has always carried out championships among committees. Every year all the committee organises as a family and we do [football] championships" (Farmer, APFP)

"We get together, party and create [football] championships between committees... we have met people we had not seen in a long time. It encouraged people to support farmers from other villages." (Farmer, APFP)

"The social support, for that they [PalmPeru] have a benefit where they give them things, for example during Christmas, they provide basketball hoops for the children." (Maria, Social Secretary, APFP)

As noted in the section addressing Cognitive Social Capital, there were significant social benefits that arose from these football tournaments and sport more broadly among farmers; in particular forming 'bridging social capital' (van Rijn et al., 2012) whereby farmers from different locations were interacting and sharing farming practices. These tournaments were funded and organised by PalmPeru and would not have taken place without the buyer's intervention – in fact due to financial constraints, PalmPeru had momentarily stopped funding the tournaments for six months and consequently they had stopped taking place, indicating that PalmPeru's role as facilitator was integral. According to Diego, the tournaments were an explicit attempt to encourage "unity" and "group efforts" and the interviews demonstrated how greater cooperation among farmers was not just good for APFP, but good for PalmPeru also. Many farmers interviewed stated that workshops and the social events organised by PalmPeru had been beneficial to both learning about roles and responsibilities within the association as well as building relationships with other farmers.

What the evidence shows is that upgrading facilitated by buyer support goes beyond process, production and functional dimensions as Schmitz (2002) lays out. Developing suppliers for the benefit of the GVC as a whole can also mean buyers taking steps to build social capabilities of suppliers, thereby shaping the process of social capital formation. Governance that goes beyond operating as arms-length and transactional is also more likely to induce learning by suppliers

from buyers (Zanfei and Saliola, 2009, Pietrobelli and Rabellotti, 2011) and in the present case study, this included learning how to be in a collective group.

6.5.4 Information Flow

This section outlines the main findings on information flow between APFP and PalmPeru. Information flow is an important dimension of governance because as the knowledge and information necessary to carry out a process becomes more complex and face-to-face communication becomes ever more important, the role of governance intensifies (Gereffi *et al.* 2005). The PalmPeru GVC displays evidence of information flow characterised by regular, face-to-face communication which was relatively open.

The main findings showed that there was regular communication between PalmPeru and APFP – as Pedro noted, stakeholders from each organisation communicated "nearly every day", with suggestions that there were few conflicts between APFP and PalmPeru because "we share ideas". This sentiment was shared by Diego who noted that communication between PalmPeru and APFP was both regular and very open. APFP and PalmPeru also shared offices in the same building which facilitated regular flows of information.

Information sharing appeared to be important to the functioning of the GVC because as PalmPeru was APFP's only buyer and vice versa with regard to supply, both organisations coordinated closely to ensure that palm fruit supply did not exceed the capacity of palm oil extraction. As already noted, the nature of palm fruit means that it cannot be stored for extensive periods of time due to over-maturation and subsequent corrosion (Poku, 2002, Hai, 2002). It was not uncommon from interviews with farmers to hear that they had been directed by PalmPeru to periodically stop harvesting palm fruit because of capacity issues at the PalmPeru factory. There was a demand from some farmers to have more information concerning this to ensure that harvesting could be effectively planned, in essence relating to scheduling standards in the GVCs (Humphrey and Schmitz, 2004). The evidence suggested that information was important to the functioning of the GVC which is indicative of a high degree of governance (Humphrey and Schmitz, 2002, Schmitz, 2005).

In addition to information related to scheduling, PalmPeru also communicated to farmers the process standards in terms of *how* they should produce palm fruit. This was done through face-

to-face contact, with technicians from PalmPeru coming directly to villages to speak with farmers and then supplemented with documentation:

"We are told [the standards] directly by PalmPeru, also through a document and during the meetings." (Farmer, APFP)

All the farmers that were interviewed were content with this process and felt that face-to-face was an effective method for them to understand what was required of them. This kind of face-to-face communication between buyer and suppliers is indicative of a high degree of governance over the chain (Gereffi *et al.* 2005). In addition to farmers learning of their obligations to PalmPeru through face-to-face communication, this channel was also important for farmers to learn information about PalmPeru itself. The delegate system (discussed under Structural Social Capital) meant that farmers had representatives who would liaise with stakeholders at PalmPeru to keep farmers informed:

"There are two people we choose that go to PalmPeru to find out information and then they come and communicate this to us during an assembly." (Farmer, APFP)

This two-way communication, which suggests a high degree of coordination between APFP and PalmPeru, is indicative of a *network* style of governance because it demonstrates mutual information flows between actors (Humphrey and Schmitz, 2004). In particular, farmers were provided with information on oil prices by stakeholders from PalmPeru which had an impact on how farmers felt about the relationship:

"They [PalmPeru] come to inform us, the manager comes, the accountant comes, and everyone comes and informs us, they say why the price has been low. This makes me happier... It is good to be informed by them. When the oil price is low, they come here and tell us what is happening, members ask why and they are told the reasons why the oil price is low" (Farmer, APFP)

"Yes, the oil information is good. Information about the prices they give to us, farmers." (Farmer, APFP)

While there was no actionable benefit from knowing why the price of palm fruit was high or low, it was still regarded as important information to farmers because it made them feel "happier", indicating that the benefit was emotional rather than functional. The evidence showed that PalmPeru regarded this as an important exercise, as reflected in key stakeholders; from the manager to the accountant, directly coming to villages and justifying the price that farmers were offered for their palm fruit through a face-to-face channel. This was corroborated by Maria and several farmers who noted that the previous manager of PalmPeru was not well thought of by stakeholders at APFP precisely because he did not come directly to villages and communicate face-to-face with farmers — indicating that this kind of information, in likelihood due to its emotive nature, could not be easily codified through standardized documentation. All of the evidence strongly points towards information as an integral aspect of governing the PalmPeru GVC and suggests that the prominence of face-to-face as a channel meant that information was difficult to codify (Gereffi et al. 2005).

Farmers not only wanted to know about prices but also the internal workings of PalmPeru itself, in part because many were technically shareholders of the company and therefore expected this kind of information to be provided to them:

"Farmers say they have be trained in management so they need basic knowledge in order to demand equal participation and evaluate the company's [PalmPeru's] financial statement, they are demanding that, they have been receiving training related to the plant for years, but they want managerial training... they want to know the income and profit, they have their shares and they want to know the profit." (Carlos, Chairman, Palm Oil Stakeholder Committee)

Farmers showed a real desire to not just receive information but to better understand the internal workings of PalmPeru because: a) it was the only buyer of APFP and therefore the health of PalmPeru closely correlated with its own; and b) many farmers are shareholders of PalmPeru and therefore have a private stake in the buyer. However what is especially pertinent to the research question was the effect this had on farmers' views of APFP as a collective organisation:

"They [PalmPeru] come and let us know how the company is going... I would like to know about the economic growth of the company. I would feel more tranquil, it would be more transparent...

I am a happier member of APFP if we are informed." (Group Interview, APFP)

"We feel better when we knew how the company [PalmPeru] is going... If the company grows, our economy will also grow, we will be happier to pay education for our children, to support our children... but if the company [PalmPeru] is going bankrupt, we will not be happy. When we are not given enough information, we could leave the meeting angry at APFP." (Group Interview, APFP)

As will be discussed further under Relationships and Trust, the very close relationship between PalmPeru and APFP meant that many stakeholders interviewed, from the manager of PalmPeru to members of APFP, regarded the fortunes of both organisations to be intertwined, as one farmer put it: "To me, PalmPeru is APFP". Indeed as noted, the shareholder relationship and the fact that PalmPeru had an exclusive supplier in APFP and APFP had an exclusive buyer in PalmPeru, reflected a real sense of shared fortunes among the two organisations; mirroring a network governance structure (Keane, 2008, Humphrey and Schmitz, 2004). In the eyes of farmers, both organisations shared responsibilities. Consequently, the level of information received by farmers from PalmPeru did not just affect farmers' attitudes towards the buyer, but also towards their own collective organisation.

6.5.5 Relationships and Trust

It is broadly accepted in the literature that relationships and trust along the GVC are critical mechanisms of governance (Bolwig et al., 2010, Gereffi, 1994, Frederick and Gereffi, 2009, Morrow et al., 2004, Kaplinsky and Morris, 2002), in most part because relationships/trust and governance both share an agenda of reducing transaction costs in GVCs (Vieira and Traill, 2008). Long-term, trusting relationships enables governance to function effectively because it prevents opportunistic behaviour, which is destructive to governance and more characteristic of armslength spot market relationships in GVCs (Sako and Helper, 1998, Kaplinsky and Morris, 2002, Riisgaard et al., 2010). The PalmPeru GVC demonstrated evidence of strong relationships, characterised by a perception of interdependency between buyer and supplier.

One way of uncovering the type of governance is to understand the structure of relationships in the GVC – if there is one buyer but many suppliers, this is indicative of a quasi-hierarchical governance structure where power is unevenly distributed. However if there is one buyer and one seller, then this suggests a network governance structure where power is more mutual (Humphrey and Schmitz 2002). The evidence in the PalmPeru GVC clearly pointed towards network governance structure because PalmPeru and APFP had only one buyer/seller, reflecting the mutuality of the relationship. Figure 15 presents the similarity of the PeruGVC to a network style of governance compared to other types of governance.

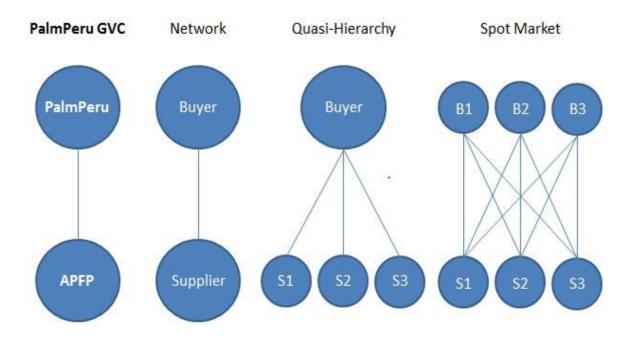


Figure 15: Network governance structure of the PalmPeru GVC

Looking at the structure alone suggests a network type of governance as proposed by Humphrey and Schmitz (2004). As previously discussed, APFP and its members have the opportunity to become shareholders of PalmPeru. All the farmers interviewed were shareholders and there was a sentiment that this was a desirable aspiration for members of APFP because it generated an annual dividend. When PalmPeru was in need of more capital (at the time of data collection, this need corresponded with the construction of a second factory) the company would offer shares to APFP members:

"PalmPeru wants to get more capital and they offer and sell shares, when you are an APFP member, you are entitled to buy shares." (Farmer, APFP)

The relationship between this structure and how members regarded their relationship with PalmPeru was highly significant because some farmers saw APFP and PalmPeru as a single integrated entity rather than two distinct organisations which, legally, they were. The perception

of farmers of their relationship with PalmPeru was linked with how they saw their relationship with APFP. This further reinforced this notion of inter inter-dependency, with PalmPeru dependent on APFP to produce palm fruit (given it was the only significant palm fruit producing organisation in the region) and APFP dependent on PalmPeru to not just buy its palm fruit, but to provide a secure channel and to bring economic benefits to the local area:

"That company [PalmPeru] is kept alive because of us farmers... thanks to us, the company is working." (Farmer, APFP)

"[The benefit of the relationship] is secure trade with PalmPeru" (Farmer, APFP)

"One good thing is that they are bringing new prospects. I mean, with the profits that PalmPeru are obtaining we are increasing the amount of jobs inthe area." (Farmer, APFP)

This level of interdependency is further evidence of a network form of governance because breaking away from the existing arrangement would, for both organisations, be very costly – a criterion for network governance structure (Humphrey and Schmitz (2004). The evidence also suggested that at the organisational level, there was a strong working relationship between PalmPeru and APFP. Stakeholders from PalmPeru and APFP noted that there were few disagreements and a high degree of collaboration:

"No the relationship is good. When PalmPeru talks and does things, APFP does the same.

Because of this, the relationship is very good... No, there aren't any disagreements." (Pedro, President, APFP)

"There is a very good relationship between APFP and PalmPeru and we are building on this because they are starting to create another factory for 2037. They work well together there is a really good integration between APFP and PalmPeru. Sometimes they come together and they don't know each other and they want to do things their own way. However are there are any real problems? No." (Maria, Social Secretary, APFP)

"We [PalmPeru and APFP] have a good relationship, like a family." [Diego, Senior Technician, PalmPeru]

"What is good is that PalmPeru offers us food or lunch when we go there [to the factory]." (Farmer, APFP)

"Over everything, [the benefit of selling to PalmPeru] is the economic benefit and also to be able to live calmly." (Farmer, APFP)

"We won't quit, but instead make the company grow. We would be worse if we left." (Group Interview, APFP)

Farmers were broadly appreciative of the relationship with PalmPeru. This was because of the way the company had brought tangible benefits to members of APFP and the perceived professionalism of the company, as one farmer noted: "Most of the things they do are being done well". Farmers perceived the relationship to be valuable precisely because it was not transactional and arms-length: "they are only salespeople", as one farmer described other palm fruit intermediaries in the region. Farmers noted that since APFP had integrated with PalmPeru, they were now able to pay for their children's education and observations at the village level showed a relatively high standard of living; with palm fruit growers typically having newer and larger homes with satellite dishes attached compared to their non-palm fruit growing neighbours. Indeed the data provided by UNODC shows significant growth in the incomes of APFP members; even high compared to the second largest palm fruit collective organisation supported by ADP in Peru.

The broad sentiment of farmers and the data on incomes and growing palm oil extraction points towards a perceived 'win-win' situation that enables structured governance models to work without the threat of opportunism (Frederick and Gereffi, 2009). Stakeholders from PalmPeru and APFP showed no desire, or even a consideration, of breaking the relationship and some even noted that they would stay with APFP precisely because of the relationship with PalmPeru:

"We would stay with APFP because we associated with PalmPeru, we are linked to them... There is not a reason so far to leave." (Group Interview, APFP)

Unlike an arms-length market structure, opportunism can be destructive to a network type of governance because of the level of interdependency between a supplier and buyer. The PalmPeru GVC exhibited non-opportunistic characteristics, both in terms of structure and sentiment. There was no evidence of asymmetrical power in the relationship — PalmPeru invested in various aspects of APFP, from training workshops to nurseries, and APFP had the capacity to supply large quantities of palm fruit (relative to other palm fruit associations in Peru) and had a shareholder stake in PalmPeru. This suggests that the PalmPeru GVC did not have a quasi-hierarchical governance structure because, rather than the buyer having asset specific investments in the supplier, both organisations had shared assets (nurseries and shares) which reflects a network rather than a captive relationship (Humphrey and Schmitz, 2004).

In terms of trust, there was no evidence that emerged which indicated that there was a breakdown of trust between APFP and PalmPeru. From Diego's point of view, cheating was a concern of PalmPeru, although it was also noted that this was only a minority of farmers. However interestingly, this concern was also from other members of APFP and not just the directive that felt that cheating PalmPeru would harm APFP:

"Some members switch trading to other smaller companies competing with PalmPeru, because PalmPeru pays every 15 days and some other companies pay every eight days or even in one day... But we are not deterred, because PalmPeru is not a one year company... According to the agreement and the rules, you cannot benefit another company, they [other farmers] are favouring their profit, they are harming us we need to look for a strategy for the company [PalmPeru] to keep growing." (Farmer, APFP)

This sense of solidarity against farmers that cheat PalmPeru was reflected in a sense of social sanctioning, where farmers would confront those that cheated because it was felt that side-selling PalmPeru was, in essence, defrauding members of APFP:

"We talk with the members we know are cheating" (Farmer, APFP).

"We bring our product and those who don't bring their products [to PalmPeru] are benefiting from those who do." (Farmer, APFP)

"This is something I have noticed. They [APFP farmers] protect PalmPeru, they monitor each other to make sure PalmPeru succeeds" (Carlos, Palm Oil Stakeholder Committee, Chairman)

As already alluded to, the close integration and interdependency between PalmPeru and APFP, indicative of a network style of governance, blurred the lines between the two organisations — PalmPeru had asset specific investments in the form of training and palm fruit nurseries, and APFP members had asset specific investments in the form of shares held in PalmPeru. As previously noted, the evidence indicated that the value chain relationship was characterised by trust. All of this appeared to have the effect of incentivising farmers to monitor each other to prevent cheating of PalmPeru and, due to the close interdependency, themselves.

As noted under Structural Social Capital, the initial creation and set-up of APFP was facilitated by the UN. Between 1992 and 2000, associational membership grew from 120 members to 200. However growth in associational membership, a proxy of structural social capital (Adhikari and Goldey, 2010, Gotschi et al., 2009), grew at a fast pace after the initial set-up period and at a time when the involvement of the UN was stopped in 2002. This suggests that while institutional support was initially important to the formation of structural capital, supporting the link between development agencies and social capital formation in the development literature (Khwaja, 2009, Grootaert and Narayan, 2004, Janssens, 2010, Vasilaky, 2013), another factor was likely responsible for the rapid growth in associational membership after this period. In fact the United Nations stopped providing institutional support for the PalmPeru GVC, due to the perception that APFP and PalmPeru were economically sustainable, at precisely the time when associational membership growth accelerated. The beginning of the relationship between APFP and PalmPeru did however shortly precede the growth in associational membership, suggesting that the coincidence of these two phenomena reflects a relationship between governance and structural social capital.

It is argued by Serra (2011) that associational membership alone does not sufficiently reflect structural social capital without a qualitative context behind it. There was qualitative evidence in the present case study that showed a relationship between members' propensity to join APFP and the relationship APFP had with PalmPeru. One participant noted that farmers in his village organised and joined APFP precisely because this was the path to sell their produce to PalmPeru:

"We had to organise ourselves in committees to be able to bring in our products to PalmPeru."

APFP is the route to PalmPeru" (Farmer, APFP)

As previously noted, farmers generally viewed the relationship with PalmPeru to be a means to improve their own economic situation, yet the only means to do this was to become a member of APFP due to the one-buyer-one-supplier structure characteristic of network governance. Furthermore, not only did farmers have to join APFP to capitalize on the comparably lucrative prices that PalmPeru offered, but farmers would also have to organise at the village level and join as a village committee. The evidence suggested that there was likely a link between the nature of value chain relationship with PalmPeru - a dimension of governance (Gereffi *et al.* 2005), and structural social capital.

As was noted under Structural Social Capital, while organisational forms of structural social capital did expand within APFP, traditional forms appeared to diminish. Interviews indicated that at the beginning of the relationship with PalmPeru, Minga was used as a means to improve palm fruit production and facilitated by communal food provided by the UN (food is important part of the Minga tradition). But as farmers become less dependent on Minga and received support to upgrade from PalmPeru, the role of Minga as a traditional form of structural social capital lessened:

"Before we were members, we worked by ourselves, but once the committee and PalmPeru was formed, we worked in groups. We used to work in groups because there was not any economic support back then, we worked in groups, that is how we supported each other, until we started to produce more palm fruit. We didn't do Minga afterwards. We got help from PalmPeru, we didn't do Minga afterwards" (Group Interview, APFP)

As previously described under Structural Social Capital, there was a widely held sentiment among APFP members interviewed that Minga was no longer relevant because their economic circumstances had changed so radically since APFP integrated with PalmPeru and, as the above quote reflects, PalmPeru was now the dominant support mechanism for farmers: "We got help

from PalmPeru, we didn't do Minga afterwards". What the findings suggest is that governance may have had a 'crowding out' relationship with structural social capital in the present case study, at least on its more traditional manifestations, because farmers saw a diminished relevancy within the context of APFP's relationship with PalmPeru.

The case study presented a complex picture between the nature of the value chain relationship and structural social capital, with an enabling role at the organisational level but a potential barrier when considering more traditional forms of structural social capital. There was also evidence of a link between governance and cognitive social capital. Farmers had a broadly trusting view of the relationship with PalmPeru and this avoided conflict within APFP which was especially important given the blurred lines of responsibility perceived by stakeholders. Table 15 summarises the main findings on governance in the PalmPeru GVC case study.

Table 15: Summary of Case Study Two findings on governance

Features of Governance	Main findings
Standards	While PalmPeru does not demand certified palm fruit of its suppliers (e.g. RSPO certification), quality standards are both required and controlled for as a means to maximise palm oil extraction. Palm fruit is tested by a quality controller at the milling stage for ripeness and appears to be critical to the effective functioning of the GVC, mirroring the literature which stresses the importance of an optimum condition of palm fruit for palm oil use. Closely related is the drive by PalmPeru to increase production.
Risk of supplier failure and buyer support	Members of APFP initially unsophisticated and "primitive" in palm fruit production, with APFP operating in a spot market structure with no governance. However after integration into the PalmPeru GVC, greater support provided by PalmPeru in terms of fertilizer subsidization and training to professionalise farmers and APFP now independent from institutional support. Close monitoring of farmers by PalmPeru conducting field visits, tight control of fertilizer inputs and investment in new palm seed nurseries. Strong evidence of process upgrading.
	Social capital a notable aspect of PalmPeru's efforts to upgrade due to the concern of waning participation of younger members in APFP. Workshops aimed to develop involvement of farmers which had improved participation in the decision making process. The primary motivation for PalmPeru to encourage farmer participation in the decision making process of APFP was to legitimise its role as governor within the context of a vertically integrated relationship.
	PalmPeru funded and facilitated sports tournaments among APFP village committees, reflecting structural social capital benefits. Evidence suggested that these tournaments were only made possible through PalmPeru's financial support. Primary motivation was to build "unity" and improve "group efforts", with PalmPeru regarding greater cooperation among farmers to be in its own self-interest as well as APFP's

Information flows	Evidence indicated regular information flow and face-to-face communication between APFP and PalmPeru, with a consistent sharing of ideas. Information important to the functioning of the PalmPeru GVC because of coordination over palm fruit supply and palm oil processing capacity, pointing towards a high degree of governance over the chain. Evidence of a mutual dependency on two-way communication that required face-to-face contact, indicative of network type of governance. Due to the interdependency and vertical integration between PalmPeru and APFP, the information received by PalmPeru also inspired farmers' attitudes towards APFP, reflecting a link between governance and social capital formation at the organisational level.	
	Findings pointed towards a one-buyer-one-supplier relationship with a high degree of interdependency and vertical integration. Evidence of shared assets, a broad sentiment of collaboration, trust and a perceived win-win relationship between both organisations, all of which are indicative of a network type of governance with blurred lines of responsibility.	
Relationships and		
trust	High degree of interdependency and vertically integrated relationship incentivised farmers to monitor each other to prevent cheating, reflecting a link between governance and structural social capital at the organisational level. However relationship with PalmPeru a barrier to traditional forms of structural social capital at the village level due to diminished relevancy within the context of farmers' rising standard of living.	

This chapter outlined the main findings from the PalmPeru GVC. The results differed from the first case study in that although structural social capital increased within the boundaries of a governed GVC, cognitive social capital did not deteriorate to the extent as it did in the PeruCacao GVC. The next chapter brings the findings together from both case studies to discuss the implications.

7 Discussion of Findings

7.1 Introduction

Chapters 5 and 6 laid out the main findings from the PeruCacao and PalmPeru case studies. Yin (2009) advises that in case study research that involved more than one case study, it is valuable to conduct a cross-case analysis to identify similarities and differences. This chapter compares and contrasts the two case studies, relating the findings back to the literature on development, governance and social capital formation. The chapter ends by presenting the contribution of knowledge.

7.2 Similarities between Case Studies

As both case studies were selected based on their scope for exploring social capital formation and GVC governance within the setting of Peru's Alternative Development Program (ADP), the clearest similarity is one based on context; both in terms of local culture/history (farmers in case studies were located in the same region of Peru) and the institutional milieu set by ADP. Farmers in the PeruCacao and PalmPeru GVCs had been impacted by the 'war on drugs' in Peru; with the lives of farmers subject to drug cartels, crime, narco-terrorism, law enforcement and opportunistic politics (Bastos et al., 2007). Likewise farmers in the PeruCacao and PalmPeru GVCs have also both been exposed to ADP. They shared the same beginnings; cacao and palm fruit were established in Peru in the late 1990's and early 2000s by donor agencies and the government as a replacement crop for coca (USAID, 2010). Cacao and palm fruit are also part of the wider push by ADP, with ADP representing an institutional structure as defined by Uphoff (1993), to build social capital among farmers through agri-food chain development (USAID, 2010, UNODC, 2013). The set-up and creation of collective organisations in both case studies were driven by institutional support, both in terms of the wider institutional structure of ADP and the prominence of international development agencies.

Moving from the context to the specific construct of social capital, similarities emerged. Cacao Collective and Bean Committee in the PeruCacao GVC and APFP in the PalmPeru GVC all experienced significant rises in associational membership since creation – a proxy for structural social capital formation (Adhikari and Goldey, 2010, Gotschi et al., 2009). Despite concerns in the findings and the literature that associational membership does not on its own provide a full

reflection of social capital (Serra, 2011), the qualitative evidence supplementing this provided a strong indication in both case studies of a rise in structural social capital.

An interesting theme to emerge from the qualitative evidence was the notion of 'professionalising' collective organisations and farmers, from previous simple structures of working to a more entrepreneurial and business-minded approach. In the PeruCacao GVC, control cards were introduced to monitor farmers' contributions and new sanctioning mechanisms for farmers who side-sold were implemented. In the PalmPeru GVC, mechanisms were also put in place to monitor and sanction members who broke the rules as well as automated contributions through the discounting of palm fruit. The parallel rises in more effective rules, procedures and precedents corresponds with the formation of structural social capital (Uphoff and Wijayaratna, 2000).

In addition to more effective rules, procedures and precedents, both case studies exhibited defined roles for leadership, also a dimension of structural social capital (Uphoff and Wijayaratna, 2000). In the PeruCacao GVC, one collective organisation (Bean Committee) introduced a dedicated manager to lead the cooperative where there was no leader before and the manager in the other collective organisation (Cacao Collective) had taken a more entrepreneurial role, taking greater responsibility for decision making. In the PalmPeru GVC, the directive of APFP had executive power and individuals were responsible for different functions of the association, both of which had developed over time. However, while the historical trajectory of structural social capital was positive in the two case studies, the scope for development in the future appeared to differ (section 7.3).

Despite rises in structural social capital at the organisational level in both case studies, traditional forms of structural social capital diminished at the village level among PeruCacao and PalmPeru farmers, manifest in the falling adoption of Minga. In both case studies, a change in culture and to some extent integration into the GVC was identified as a factor for its deterioration. However, there were some differences between the two case studies, as will be noted in section 7.3.

In terms of cognitive social capital, there were some similarities between the two case studies. While the findings suggested that structural social capital had risen among farmers in both the PeruCacao and PalmPeru GVCs, the evidence on cognitive social capital was less positive.

Farmers in the PeruCacao GVC resisted an increase in member contributions and there was evidence of mistrust in the management of collective organisations and indeed among the directive itself. Farmers in the PalmPeru GVC perceived diminishing "unity" over time and younger farmers were less attracted to participating in APFP. While social capital was clearly not as strong as structural social capital, there was some evidence to suggest that farmers in the PalmPeru GVC had developed more cognitive social capital than in the PeruCacao GVC and in fact, there were indications that cognitive social capital had actually deteriorated in the latter.

Moving from a comparison of social capital towards that of governance, both case studies reflected evidence of governance over the GVC, with buyers shaping the participation of farmers in accordance with the definition of GVC governance in the literature (Gereffi, 1994, Humphrey and Schmitz, 2004). Farmers in the two case studies followed standards set by the buyer, with Cacao Collective and Bean Committee pursuing organic certification driven by PeruCacao and APFP committed to quality standards set by PalmPeru. Linked with this was the necessity of buyer support to facilitate the meeting of these standards. Previous to their integration into governed GVCs, farmers in both case studies were operating in transactional spot markets with few requirements demanded of them. However after integration, there was a necessity for buyers to explicitly step in to facilitate the upgrading of farmers and close monitoring of practices, all of which are indicative of a high degree of governance (Gereffi et al., 2005, Humphrey and Schmitz, 2002).

Further to the similarities in buyer support was the nature of the upgrading process. In particular, buyers in both case studies set up workshops with the aim to improve the participation of farmers. There was a very explicit attempt to improve both structural social capital and cognitive social capital from the buyers' point of view. In the PeruCacao GVC, the incentive to develop social capital was related to the dysfunction and poor direction of collective organisations that impacted on the ability of PeruCacao to supply high quality (and consequently higher value) cacao to European chocolatiers. In the PalmPeru GVC, the incentive to develop social capital could be found in the desire to legitimise PalmPeru's governance over its sole supplier. However the evidence suggested in both case studies that it was easier to upgrade structural social capital than cognitive social capital, in large part due to the cultural entrenchment of the latter.

Moving onto information flow as a dimension of governance, there were parallels between the PeruCacao and PalmPeru GVCs. There was regular information flow and face-to-face communication between collective organisations and buyers and there was clearly a necessity for information sharing for effective functioning of the chain - indicative of a governed GVC (Humphrey and Schmitz, 2002). The nature of relationships and trust between buyers and suppliers were likewise essential to the functioning of case study GVCs. Both PeruCacao and PalmPeru had asset-specific investments in their suppliers, meaning that if the relationship was to break, buyers would lose non-recoupable investments. For Cacao Collective and Bean Committee, certification was financially supported by PeruCacao, and PalmPeru set-up nurseries for APFP to expand farmers' production. It was recognised in both case studies that relationships and trust were fundamental to buyers maintaining their hold on these investments and suppliers continuing to benefit from them, mirroring the literature on the role of relationships and trust to maintain governance in GVCs (Frederick and Gereffi, 2009). Despite these similarities, there were also important differences in the nature and structure of the relationship in the GVC, discussed in section 7.3.

7.3 Differences between Case Studies

While case studies shared the same institutional environment in the form of ADP, the microcontext contrasted. PeruCacao had its own NGO - HelpCacao, acting as a dedicated support arm and a channel to funnel wider institutional support from ADP projects. Through this network of a buyer, an NGO and institutional support, PeruCacao supported collective organisations and developed the competencies of its suppliers over time, reflecting the role that multi-faceted linkages have in bringing collective organisations into competitive value chains (Mutersbaugh, 2005, Roy and Thorat, 2008, Neilson, 2008, Okello et al., 2011, Asem-Bansah et al., 2012, Challies and Murray, 2011). In contrast, the PalmPeru GVC case study exhibited significant support from the United Nations during the creation and set-up of APFP and PalmPeru, but later lost this support due to the perception that the GVC was now commercially sustainable. According to the development literature, support from development agencies is critical to social capital formation (Khwaja, 2009, Grootaert and Narayan, 2004, Janssens, 2010, Vasilaky, 2013). Although the PeruCacao GVC continued to receive support since its creation, while the PalmPeru GVC had ceased to receive any, there were no notable differences in social capital formation between the two case studies that could be sufficiently explained by the contrast in the micro- context.

Another notable contrast was in size of collective organisations and income. Cacao Collective and Bean Committee had 231 and 90 members enrolled respectively, compared to 665 members in APFP. It is argued by some in the literature that as groups grow, social capital is harder to form (Becker and Ostrom, 1995, White and Runge, 1995). However, this was not evident in the present research and in fact the findings contrasted with this notion because it was the large collective organisation - APFP, that appeared to have stronger levels of social capital compared to the significantly smaller Cacao Collective and Bean Committee. Likewise, some of the challenges facing Bean Committee in terms of its scope for sanctioning were directly attributable to its small size. The economic situation of farmers also differed greatly. Both documentation from the UNODC and observations by the researcher showed that incomes of palm fruit growers were significantly greater than those of cacao farmers, even though prior to ADP, both faced a similar socio-economic situation influenced by coca production in the region.

When comparing structural social capital formation among farmers, there were some differences. While both case studies experienced a rise of structural social capital within their respective collective organisations, the scope for further development differed. In the PalmPeru GVC, farmers were open to contributing more to APFP and there was little evidence of push back against the increasingly hierarchical structure of the collective organisation. Conversely, evidence from the PeruCacao GVC indicated that the continued intensification of structural social capital at its current rate was unlikely to be sustainable because farmers and some members of the directive were either strongly resisting these changes or completely ignoring them through side-selling or failing to contribute. While there is a link here between structural and cognitive social capital such that the former is facilitated by sufficient stock of the latter reminiscent of the overlap between the two (Uphoff and Wijayaratna, 2000); what really defined the difference between the two case studies was farmers' existing attitudes towards social structure. Farmers in the PalmPeru GVC had only ever known a social structure in APFP that was hierarchical in nature and were predisposed to further development of structural social capital, whereas farmers in the PeruCacao GVC were used to a social structure where rules, monitoring, sanctioning and strong leadership were almost non-existent.

Despite cognitive social capital being less evident than structural social capital across both case studies, the findings indicated that cognitive social capital formation was higher in the PalmPeru case study. Farmers interviewed in the PeruCacao GVC were resistant to contributing to their collective organisations, had a high propensity to side-sell, in some cases expressed deep

mistrust in the directive and there was even evidence to indicate mistrust among the directive itself. However in the PalmPeru case study, in spite of falling participation among younger farmers and a sense that the freedom of farmers had fallen, a high level of commitment was observed in terms of a willingness to contribute and an understanding of its value to the collective by farmers, thereby reflecting a degree of social capital (Uphoff and Wijayaratna, 2000). While not necessarily being cases that reflected extremes, it can be concluded that some cognitive social capital formation was evident among farmers in the PalmPeru GVC and less so in the PeruCacao GVC.

Moving from differences in social capital to differences in governance, there were no significant contrasts in standards. Although collective organisations faced different standards in terms of organic certification for cacao and quality standards for palm fruit, in essence both were associated with product parameters in terms of appearance and quality (Reardon and Farina, 2002) and process parameters with regard to defining farmers' production techniques (Reardon et al., 2001b). On a broad level, buyer support was evident in both case studies, with a risk of supplier failure if buyers did not intervene in suppliers' affairs, thereby setting a justification for governance in both case studies and corresponding with the literature on governance and buyer support (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007).

Although on a broad level there were no obvious differences between buyer support of PeruCacao and PalmPeru, as already mentioned, one small yet important aspect where buyer support did differ was where PalmPeru invested in cross-village football tournaments at the village level among APFP farmers. This filled the hole in village structural social capital when Minga diminished as a cultural practice. PeruCacao on the other hand did not facilitate cooperation at the village level, in part because villages had a diverse range of members from different collective organisations, with Cacao Collective and Bean Committee typically representing the minority of cacao farmers in respective villages, and PeruCacao's sentiment that members' villages were beyond its scope of responsibility. The impact of this was that there was a structure for information sharing among APFP farmers not just within villages, but between villages. This contrasted with the villages of Cacao Collective and Bean Committee which lacked such a structure for cooperation when Minga faded.

The idea of social capital deteriorating as a result of changing cultural attitudes is well understood in the literature (Nilsson et al., 2012, Molyneux, 2002). However as far as is known,

the notion of a buyer in a GVC investing in the social capabilities at the village level for the purpose of social capital formation is novel to the existing body of literature and contests the pessimistic view of the role of outside influencers, including buyers, on social capital formation (Messner, 2004, Bingen et al., 2003, Rabellotti, 2004, Lyon, 2000, Coleman, 1990, Vollan, 2012, Pretty and Ward, 2001).

Information flow was an aspect of governance that was identified as essential to the functioning of the GVC in both case studies. An area of difference was how information from buyers was being disseminated to farmers. In the PeruCacao GVC, there was evidence of some farmers feeling that information was not being effectively passed down by PeruCacao and that PeruCacao placed more importance on information sharing with the directive than with farmers. On the contrary, the PalmPeru GVC exhibited a much greater focus on face-to-face, two-way communication directly with APFP members. The contrast in case studies parallels the difference in the literature between a quasi-hierarchical governance structure where information and power is asymmetric in favour of the buyer and a network governance structure where information flow is two-way and power is more evenly distributed (Humphrey and Schmitz, 2004).

Evidence that there was a variance in governance types between case study GVCs was further supplemented by differences in the relationship structure of the GVC. In the PeruCacao GVC, there was one dominant buyer and a multitude of collective organisations acting as suppliers. This kind of structure is indicative of a quasi-hierarchical GVC because there are several suppliers dependent on a single buyer (Humphrey and Schmitz, 2004). Juxtaposing this was the PalmPeru GVC, with PalmPeru and APFP representing the buyer-supplier relationship and a high degree of vertical integration. The PalmPeru GVC is indicative of a network governance structure with a one buyer, one supplier relationship (Humphrey and Schmitz, 2004).

Digging deeper into the governing relationship and trust, there were clear differences that emerged. Farmers interviewed in the PeruCacao GVC were generally discontent with being in a 'captured' relationship with PeruCacao and there was the desire of some farmers to break the relationship and sell to intermediaries. This was in part due to the perception by some cacao farmers that rewards were unevenly distributed between PeruCacao and its suppliers, reflecting the importance of the way distributed rewards and risks are perceived in governed GVCs (Kaplinsky, 2004b, Gereffi and Lee, 2012). Indeed the lack of trust in the PeruCacao GVC was a

real threat to the sustainability of the GVC given that renewal of the contract with PeruCacao would have to be voted on by farmers and the leadership of Cacao Collective in particular could quite easily be voted out if farmers perceived that the directive was not working in their interests. On a fundamental level, a quasi-hierarchical governance structure necessitates buyers to 'capture' suppliers as a means to protect asset specific investments and prevent opportunism (Gereffi *et al.* 2005); however farmers in the present case study were discontent precisely because they did not want to be in a captured relationship.

The degree to which suppliers are 'captured' in GVCs is often discussed in terms of suppliers' scope for product, process and functional upgrading (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007), but there is nothing in the literature about what being captured means for the social relationships *among* farmers. Understanding this phenomenon is critical to the question of how suppliers participate in GVCs because while there could be ample scope for upgrading, it means very little if the relationships between farmers break down and collective organisations consequently exit the GVC in favour of spot-market participation. Given that integration into lucrative export chains is a key element of current rural development strategies (Fischer and Qaim, 2012) and governance plays a growing role in such value chains (Gereffi and Lee, 2012), the findings go beyond the narrow scope of impacts at the farm level that the GVC literature has considered thus far.

Farmers in the PalmPeru GVC presented a very different picture to that of the PeruCacao GVC. Interviews with APFP members showed a broad sentiment of collaboration and trust in PalmPeru and no desire to break the GVC relationship. Many farmers in APFP were shareholders in PalmPeru, some of PalmPeru's executive board were representatives of APFP and there was genuine inter-dependency in the relationship with little evidence of asymmetric power. There was no sign in the PalmPeru GVC that the relationship between APFP and PalmPeru was under threat and every reason to believe that it would continue in the future given the strong commitment of interviewees in both organisations. The nature of relationships and trust are in most part overlooked in the original GVC framework (Riisgaard et al., 2010) - the contrast in the case study findings demonstrate how important these dimensions are in order to fully explore the concept of governance in GVCs. The findings highlight that while governance could be constraining for cognitive social capital as was the case in the PeruCacao GVC, it may also have a positive association if the nature of the governing relationship lends itself as such.

7.4 Summary and Contribution to Knowledge

7.4.1 Introduction

The present research is exploratory by nature and therefore while it cannot prove or disprove propositions, it can generate propositions around the formation of concepts (Yin, 2009). Despite the limited scope of the research to cover all influencing variables that shape social capital formation, emerging factors that correspond with the literature are documented to highlight themes that support the existing body of research. This is then followed by laying out the novel contribution to knowledge of the present research; principally the proposition of a theoretical relationship between social capital formation and governance of GVCs and, on a broader level, a perspective on social capital using the governance framework that augments existing models of social capital formation.

7.4.2 Existing Literature on Social Capital Formation

The research identified a number of factors in social capital formation among farmers that participate in GVCs, many of which correspond with the social capital literature. Rules and sanctioning were important in both case studies in enabling social capital in that it constrains individualistic behaviour that is destructive to collective organisation (Becker and Ostrom, 1995, Coleman, 1990, Pretty and Ward, 2001, Molinas, 1998, Woolcock, 1998) and the PeruCacao GVC case study highlighted not just monetary sanctioning but reputational sanctioning also (Nooteboom, 2007). On the other side of the coin, the PeruCacao GVC and the Bean Committee cooperative in particular showed how enforceable rules and sanctioning that are seen as too constricting by group members can be detrimental to social capital formation (Fulton and Giannakas, 2001, Nilsson et al., 2012). Strong leadership of collective organisations was also a factor in both case studies, reflecting the role of leadership in social capital formation (Serra, 2011, Vollan, 2012, Goetz and Rupasingha, 2006, Krishna, 2004, Kaganzi et al., 2009) and structural social capital formation specifically (Uphoff and Wijayaratna, 2000). To an extent, the findings demonstrated the complexity of separating cause and effect in social capital research in that rules and sanctioning enabled the formation of social and also represented a manifestation of social capital as well (Lyon, 2000).

It is argued that the qualitative differences among members of the group can be a barrier to social capital formation, especially when related to cultural differences (Woolcock, 1998, Beard, 2007, Klitgaard and Fedderke, 1995, Easterly and Levine, 1997, Castle, 1998, Huffman and Feridhanusetyawan, 2007). In the PeruCacao GVC, religious heterogeneity was a barrier to social capital formation at the village level among farmer members, especially with regard to the practice of Minga, a manifestation of structural social capital. Linked with this is the role of culture and historical context in social capital formation. The findings are in agreement with the literature that culture is a factor in social capital formation (Nilsson et al., 2012, Molyneux, 2002). Indeed a lack of a homogenous culture among farmers in the PeruCacao GVC was a particular barrier to social capital formation at the village level, reflecting arguments made in the literature (Munoz et al., 2007, Aggarwal, 2000). It has been observed in the literature that Andean communities typically regard the indigenous population in South America as having a very different identify (Ansion, 2004). However despite this, there was no evidence to suggest that ethnic and religious diversity was a factor in the PalmPeru GVC despite these differences existing among farmers, reflecting the literature (Bhattacharyya et al., 2004).

In both case studies, the findings not only showed that structural social capital was formed, but was formed in a short space of time. In the PeruCacao GVC case study, structural social capital had significantly developed inside collective organisations within 2-3 years, with more effective rules, procedures and precedents put in place. Likewise farmers in the PalmPeru GVC went from "primitive" ways of working to a highly professionalised association in less than 10 years. Some authors propose that social capital can be formed in a short period of time (Grootaert and van Bastelaer, 2002, Kaganzi et al., 2009). Given that cognitive social capital formation was not especially strong in either case study, maturity could be more important as an enabler where this particular dimension of social capital is concerned which would correspond with the literature that argues since trust is culturally and historically embedded, it cannot be created within such a short space of time (Maclean, 2010, Woolcock, 1998, Lyon, 2000). Indeed given there was evidence that cognitive social capital had marginally increased more in the PalmPeru GVC than the PeruCacao GVC, and the former had over three times more time to develop than the latter within the context of buyer-supplier engagement, maturity could be a factor in explaining differences between the two case studies.

Some authors contend that the role of actors such as NGOs and international development agencies act as enabling forces for social capital formation (Khwaja, 2009, Grootaert and

Narayan, 2004, Janssens, 2010, Vasilaky, 2013). These actors were evident in both case studies, although their role differed greatly. In the PeruCacao GVC, the role of development agencies was critical to providing support to collective organisations in terms of the provision of technicians and farmer workshops. In the PalmPeru GVC, although the United Nations provided significant financial support for APFP and PalmPeru during the 'embryonic' stage, structural social capital formation appeared to actually develop *after* this institutional support was cut off. Despite this, it would be false to say that institutional support was not critical in the PalmPeru case study given that its very creation was dependent on it.

7.4.3 Contribution to Knowledge

The previous section summarises the themes and factors that were both identified in the research and correspond with the existing body of knowledge on social capital. While social capital has been studied extensively in the literature, how social capital is formed has been paid relatively less attention and gaps remain in a social capital conceptual framework (Staber, 2007). It is now well established that governance plays a significant role in shaping how farmers participate in GVCs (Gereffi and Lee, 2012) and there are calls for research into how governance impacts the immediate milieu that farmers operate in (Bolwig et al., 2010, Challies, 2008, Fold and Gough, 2008) and in particular, how governance may influence the 'cohesion' of farmers (Messner, 2004). To review, the research question of the thesis was as follows:

How does the Governance of a Global Value Chain shape the formation of social capital among farmers?

The study contributes to the development literature by developing propositions, initially presented in the conceptual framework chapter, on the association between governance and social capital based on the insights drawn from the findings. Until now, there has been no known attempt to bring a governance perspective to a social capital conceptual framework. The theoretical arguments made here go beyond existing views in the literature which have typically regarded social capital formation to be an endogenous process or in other words, that the factors that enable social capital among farmers are contained solely within a particular group of farmers, rather than external structures that enable or constrain social capital (Lyon, 2000, Ostrom, 1992, Becker and Ostrom, 1995).

In both case studies, structural social capital formation increased substantially since integration into the GVC. This was evidenced by more effective rules, roles for decision making, procedures and precedents that correspond with the formation of structural social capital (Uphoff and Wijayaratna, 2000). These changes to structural social capital took place in collective organisations after they integrated into governed GVCs. The insights suggested that how buyers shape the participation of farmers - the very definition of governance (Gereffi and Lee, 2012, Frederick and Gereffi, 2009), may have had a positive association with structural social capital formation. However based on the findings, it is also very likely that the association was moderated by a range of factors – most notably the institutional context and culture. Therefore, a theoretical contribution to the literature is the proposition that:

P1: Governance can be an enabler of structural social capital formation among farmers in a Global Value Chain, shaped by the institutional context and existing attitudes towards social structure

The findings from the case studies provide insight for the theory behind P1. Collective organisations in GVCs that operate in spot-markets, where the only governor is that of price, have low demands placed on them, reflected in the absence of stringent standards and buyers that actively shape participation (Gereffi *et al.* 2005). But when farmers integrate into a governed GVC, the *rules of the game* change. New standards emerge, demands on farmers intensify and the propensity for buyers to intervene increases. With new rules of the game, collective organisations must change and one aspect of this is structural social capital; the rules, roles for decision making, procedures and precedents that provide the framework for cooperation among farmers. Indeed in the two case studies, this change was not a choice of farmers isolated from the external environment; it was an explicit demand of buyers.

In terms of other factors, the case studies presented findings that suggest that the scope for governance to form social capital is shaped by at least two factors. The first is the institutional context. A clear similarity between the two case studies was their embeddedness in the rich institutional context provided by ADP, reflected in the secondary data that was presented and summed up by the owner of Cacao International: "We live in an environment where there are probably too many projects available and everybody is benefitting from them". In the PeruCacao GVC, it was clear that institutional support had a powerful role in facilitating the training, workshops and the implementation of the social technician in conjunction with the support

provided by PeruCacao. What was especially noteworthy was that not only did PeruCacao siphon funding from the institutional environment, but there were also indications that the propensity of NGOs to offer their support may have increased by the existence of dedicated buyers, due to the perception that a governed GVC signalled a more economically sustainable GVC.

In the PalmPeru GVC, the role of the institutional context was less clear given that structural social capital appeared to rise *after* institutional support was pulled. However it is certainly true that the creation of PalmPeru and APFP was entirely dependent on the support provided by the United Nations and therefore it could be said that the conditions for the governing relationship were very much shaped by the institutional context. Contrasting with the idea that governance is 'de-linked' and 'autotomized' from the institutional context which has typified much of the GVC literature (Gibbon, 2001, Petkova, 2006, Ponte et al., 2014), the findings show that the institutional environment it is a key factor to consider when understanding how governance shapes participation of farmers.

The second factor – existing attitudes to social structure, also emerged when analysing the link between governance and structural social capital. In this context, existing attitudes to social structure is expressed as farmers' disposition towards changes in structural social capital, or in other words the sentiment of 'how we do things here' - distinct from what is termed 'culture' in the social capital literature which is seen as largely unchanging and historically embedded (Lyon, 2000, El-Said and Harrigan, 2009, Maclean, 2010, Woolcock, 1998, Coleman, 1990). There is also a clear conceptual similarity between existing attitudes towards structural social capital and cognitive social capital, since attitudes and beliefs that are conducive to cooperation is a dimension of cognitive social capital (Uphoff and Wijayaratna, 2000).

Although there was no juxtaposition because both case studies exhibited high structural social capital among farmer groups, it was evident in the PeruCacao case study that a willingness by collective organisations to change the rules, roles for decision making, procedures and precedents was a necessary condition. Cacao Collective had developed its structural social capital significantly and this had only been made possible by members' consent; but there were signs that members were beginning to push back against this new structure in part because they were used to norms where rules were negligible. Bean Committee, while developing its structural social capital far beyond what existed prior to integration into the PeruCacao GVC, was facing challenges in putting in place sanctioning mechanisms because members were not used to

these new structures. In the PalmPeru GVC, there was no sign that structural social capital could be stunted in the future because members of APFP had only ever known a 'top-down' decision making structure and members' contributions had been firmly 'normalised' into the organisational culture. Furthermore, at the farm level, inter-village sports tournaments financed by PalmPeru was a success precisely because it capitalised on an activity that was a more relevant social structure to farmers than Minga.

Moving the discussion from structural social capital, there is also no known theory on the association between governance and cognitive social capital in the literature. In the PeruCacao GVC case study, there was limited evidence of cognitive social capital formation and even indications of deterioration. This contrasted with PalmPeru GVC, where although cognitive social capital formation was not as explicit as that of structural social capital, there was evidence of unity among farmers and a commitment to APFP. The two case studies exhibited contrasting governing relationships based on the GVC framework in the literature (Humphrey and Schmitz, 2004). In particular, the nature of the governing relationship differed. The second proposition to emerge from the findings is:

P2: Governance can be an enabler or barrier for cognitive social capital formation among farmers, depending on the nature of the governing relationship

The theoretical foundation of P2 stems from the existing GVC literature and the findings in the present research. It is well understood in the GVC literature that the nature of relationships and trust along the chain is an important component of governance (Bolwig et al., 2010, Riisgaard et al., 2010, Vieira and Traill, 2008, Wiegratz, 2008, Wiegratz et al., 2007), including the way rewards and risks are distributed (Kaplinsky, 2004b, Gereffi and Lee, 2012) and the extent that the relationship is perceived as a 'win-win' situation by both parties (Frederick and Gereffi, 2009). In the PeruCacao GVC, many farmers perceived the relationship to be one-sided, lacking a 'win-win' outcome and experiencing asymmetric information flow. The sentiment was that their self-determination had been restricted as a result of integrating into the GVC, indicative of a quasi-hierarchical governance structure where the buyer must enforce protective measures to secure asset-specific investments (Gereffi *et al.* 2005). The findings suggest that the poor relationship with PeruCacao injected a degree of social dysfunction within collective organisations, with side-selling prevalent, members not meeting their obligations with regard to contributions, mistrust in leadership and conflict among farmers.

In the PalmPeru GVC, the relationship between buyer and supplier was very different. Although APFP could only sell to PalmPeru, PalmPeru could only buy from APFP also. There were no real alternatives for either organisation to buy or sell elsewhere due to their unique scale in the region; they were inter-dependent with shared assets between both parties, and power and information flow was evenly distributed in the relationship — all of which is characteristic of a network governance structure (Humphrey and Schmitz, 2002). In this governing relationship, farmers were not 'captured' by the buyer any more than the buyer was 'captured' by farmers and the general sentiment was that APFP and PalmPeru were 'in it together'. The theoretical association here is that a positive governing relationship fed into a more cohesive collective organisation, despite there still being challenges in cognitive social capital formation. If a relationship is perceived as 'win-win', interdependent and trusting, then there is less incentive for farmers to side-sell, a greater willingness to contribute and consensus rather than conflict over the direction of the collective organisation, all of which is manifest from cognitive social capital.

Table 16 summarises the theoretical contribution to knowledge derived from case studies and the existing literature.

The core of the upgrading proposition in the literature is that buyers develop their supply base because buyers and suppliers in governed relationships fail or succeed together. Given it is well understood that social capital generates a range of benefits, from productivity gains (Uphoff and Wijayaratna, 2000, Vasilaky, 2013, Binam et al., 2004) to agricultural innovation (van Rijn et al., 2012, Lambrecht et al., 2014), it is surprising that social capital has not been explicitly positioned as part of the discourse on governance and upgrading among suppliers thus far. The present research therefore offers a contribution by highlighting the social capital is an important factor for farmers to upgrade in GVCs.

An unexpected finding was one that went beyond the interaction between governance and social capital, to the interaction between structural and cognitive social capital. It is assumed in the literature that structural and cognitive social capital is complimentary and reinforcing (Adhikari and Goldey, 2010, van Rijn et al., 2012). What emerged in the PeruCacao GVC was that increases in structural social capital can be detrimental to cognitive social capital because farmers did not trust in the more stringent rules being constructed around them, which translated into tensions within collective organisations. In the conceptual framework, it was

assumed a complimentary interaction between structural and cognitive social capital would come from the findings, yet a more contentious and complex relationship materialised.

Table 16: Propositions development from the research

Propositions	Theory
Governance can be an enabler of structural social capital formation among farmers in a Global Value Chain, shaped by the institutional context and existing attitudes towards social structure	When integrating into governed GVCs, collective organisations must transform their capabilities to meet new and more stringent standards placed on them; including their internal rules, roles for decision making, procedures and precedents. In some cases, buyer support is necessary. The scope for governance to shape structural social capital is moderated by the institutional context and existing cultural norms. A context rich with institutional and donor support can incentivise and facilitate the efforts of buyers to invest in the social capabilities of farmers. Existing cultural norms also
	moderates the degree that farmer groups are willing and able to change their internal processes that reflect improvements in structural social capital.
Governance can be an enabler or barrier for cognitive social capital	The nature of the governing relationship with a buyer is either an area of consensus or an area of discord among farmers. When the governing relationship is characterised by mistrust, a perceived losing outcome and asymmetric information flows; side-selling and internal conflicts over the collective group's direction rise and the willingness to contribute falls.
formation among farmers, depending on the nature of the governing relationship	On the other hand, when the governing relationship is characterised by trust, a perceived 'win-win' outcome, two- way communication and interdependency; there is less incentive to side-sell, fewer areas for internal conflict to arise from and farmers are more inclined to contribute because they have more confidence in the direction of the collective group.

On a methodological level, the study contributes to the literature by highlighting the issue of associational membership as a potentially paradoxical proxy indicator for structural social capital. In the PeruCacao GVC case study, both Cacao Collective and Bean Committee had a surge of membership that was given rise by poor enforcement of rules and procedures. Although Serra (2011) questions associational membership as an indicator; as far as is known, the present study is the first to empirically demonstrate that high associational membership can be the result of a breakdown in aspects of structural social capital – specifically rules and procedures that facilitates effective (Uphoff and Wijayaratna, 2000).

On a broader level, the present research contributes to the literature by bringing a new perspective to social capital formation in GVCs. It is well understood that buyers shape the

participation of farmers (Kaplinsky and Morris, 2002, Gereffi et al., 2001); yet despite this there has been limited attempts to bring together the vertical concept of governance with horizontal phenomena at the farm level (Challies, 2008, Fold and Gough, 2008, Bolwig et al., 2010) and more specifically, how the 'cohesion' of farmers in developing countries changes when integrated into GVCs has not been sufficiently explored (Messner, 2004). When considering the meta-theories of rural development, the study contests the two ends of the theoretical spectrum that has historically characterised rural development theories. The GVC and governance model is manifest from an *exogenous* approach; the basic claim in the GVC literature is that the drivers of rural development are found outside of rurality and GVCs represent the link that channels wealth from developed, urban consumers to farmers (depending on how risks and rewards are distributed). On the other hand, the *endogenous* approach to rural development is at the core of current theories of social capital formation because they focus on internal linkages as the source of development and regard outside linkages as ineffective or detrimental to this process (Lyon, 2000, Ostrom, 1992, Becker and Ostrom, 1995, Vollan, 2012, Pretty and Ward, 2001).

The present study expands these approaches by demonstrating the power of a 'neo-endogenous' model where both internal and external linkages are combined (Ray, 2002). When scholars call for more to be done to bring the analysis of GVCs and the analysis of the local milieu together (Bolwig et al., 2010, Neilson, 2008, Challies, 2008, Fold and Gough, 2008) - the combination of the vertical with the horizontal, they are implicitly arguing for a neo-endogenous approach rather than the extremes of the theoretical spectrum. The present research takes a small but important step in contributing to the development literature by bridging social capital formation with governance of GVCs into a single piece of research, thereby combining the vertical with the horizontal and as a result, the exogenous with the endogenous.

8 Conclusion

8.1 Introduction

The previous chapter presented the discussion of findings from the two case studies, identifying similarities and differences and how the findings contribute to the literature. This final chapter concludes the thesis by addressing the research question and indicating a direction for future research.

Section 8.2 presents the answer to the research question based on the empirical findings, synthesising the arguments that were made. This is followed by section 8.3 with the implications of the research, both theoretical and policy wise. Sections 8.4 and 8.5 presents the limitations of the study and provides advice on which issues would be worthwhile to investigate in the future within this context. The chapter ends with section 8.6 that briefly places into context the contribution of the thesis within the wider International Development (ID) theoretical discourse.

8.2 Findings

The findings revealed a number of different enablers and barriers to social capital formation among farmers in GVCs. Some of the themes that emerged from the findings corresponded with the literature and the conceptual framework developed as part of the overall research design, including: rules and sanctioning, group diversity (ethnic and cultural), culture/history and the role of the institutional context (including institutions and institutional organisations). This study reinforced the role of these factors in social capital formation among farmers when placed within the context of a GVC.

Moving on from the findings that support the previous literature, the main aim of the exploratory study was to explore what the role of governance is in the formation of social capital among farmers in GVCs. The findings in both case studies indicated that structural social capital rose substantially among farmers when their respective collective organisations integrated into governed GVCs as evidenced by more effective rules, roles for decision making, procedures and precedents being put in place. In the PeruCacao GVC case study, collective organisations displayed evidence of better defined leadership roles and more effectives rule and sanctioning over time, for instance introducing control cards and excluding members for cheating. Likewise

in the PalmPeru GVC case study, the farmer association had developed an executive decision making structure with different functions delegated to specific individuals and strict monitoring mechanisms put in place to prevent cheating. While farmers in both case studies experienced a diminishing of traditional structural social capital at the village level, the evidence suggested that this was due to the cultural context and in the PalmPeru GVC case study new forms of structural social capital had been facilitated by PalmPeru to replace its traditional predecessor.

While structural social capital was formed in both case studies, the picture of cognitive social capital was mixed and as a result, the findings were more nuanced and complex. Both GVCs exhibited explicit governance from buyers, but the nature of the governing relationship differed. In the PeruCacao GVC, the relationship between PeruCacao and the two case study collective organisations was characterised by mistrust, a lack of a 'win-win' exchange as perceived by farmers and asymmetric information sharing in favour of PeruCacao. The juxtaposition of this was offered by PalmPeru GVC where the governing relationship displayed a high level of trust and interdependency, a perceived 'win-win' outcome from the perspective of farmers and communication that flowed in both directions.

Corresponding with a distinct governing relationship was the contrast in cognitive social capital among farmers. In the PeruCacao GVC, cognitive social capital was low; there was resistance from farmers to increase contributions, prevalent cheating through side-selling and mistrust in the management among members and even among the Directive itself. In the PalmPeru GVC, although the picture was not the juxtaposition of the PeruCacao GVC, there was evidence that farmers had a strong commitment with regard to a propensity to contribute and an appreciation for mutually beneficial collective action.

8.3 Implications

8.3.1 Theoretical Implications

The research began by acknowledging that a conceptual framework of social capital amongst farmers in governed GVCs is incomplete. Therefore the contribution of the study was not one based on confirming a theoretical proposition, but rather developing propositions derived from the case studies that could be tested through further research — an ideal contribution of case study methodologies (Bennett, 2004, George and Bennett, 2005, Yin, 2009). This section lays out

the proposed propositions, developed from the propositions presented in chapter 3, followed by a discussion of its contribution to the wider theoretical literature.

The two theoretical propositions of the present research are separated by the two dimensions of social capital, structural and cognitive. The first theoretical proposition concerning cognitive social capital was as follows:

P1: Governance can be an enabler of structural social capital formation among farmers in a Global Value Chain, shaped by the institutional context and existing attitudes towards social structure

A theory of this association was developed in the discussion of the findings. Groups of farmers who go from spot-markets to governed GVCs face different rules of the game that force them to change how their organisational processes operate - processes that correspond with structural social capital. An analogy may shed light on the proposition. If a sports club that had played in a lower league one day suddenly found itself in the highest league - it would have to change the way it operated, from how the team was managed to a stricter regime for its players. Previous procedures and precedents would no longer apply – it would, in effect, have to organise itself in a way that was conducive to the new competitive environment it now faced. If the team received external financial support from a sponsor, then its ability to develop would be greatly increased; through better training facilities to more experienced coaches – but if limited external support were provided, it would be difficult to conceive how such a club would survive in the top league. If the team looked upon this new structure favourably, they may have a greater chance to stay up - but if players were previously embedded in an attitude towards structure characterised by regularly skipping training, failing to keep to an appropriate diet and/or placing little value in the authority of the manager, the ability of the club to make the kind of necessary structural changes would be contested.

The analogy is transferable to structural social capital among farmers in governed GVCs. Collective organisations that were previously used to selling to spot-markets with few external pressures, akin to the lowest sports leagues, now compete in environments analogous to the highest leagues that demand strict standards and in turn, farmers must transform their structural social capital to participate. In short, groups of farmers either structurally adapt or they are relegated from governed GVCs (dynamic ex-suppliers of PeruCacao knew well). The

institutional context can facilitate and incentivise buyers to invest in the social capabilities of farmers, and existing attitudes towards social structure moderate the willingness and capacity of farmers to develop their social capital.

Moving from the theoretical implications for structural social capital to cognitive social capital, the second proposition to emerge as a result of the research was as follows:

P2: Governance can be an enabler or barrier for cognitive social capital formation among farmers, depending on the nature of the governing relationship

When the nature of the governing relationship is typified by a lack of trust, the relationship is not mutually beneficial and information flow is not two-way; the propensity of farmers to side-sell and disagreements over the collective group's direction grow while the disposition to contribute falls. On the other side of the coin, when the governing relationship is characterised by a high degree of trust between buyer and suppler, the relationship is regarded as 'win-win' and interdependent and information flows both ways; there is less propensity to side-sell, farmers are more confident in the direction of the group and therefore more inclined to contribute, and there is one less topic for farmers and management to disagree on. At its most basic level, the proposition is based on the idea that for a collective organisation, the governing relationship with a buyer is either an area of accord or an area of conflict for farmers and the directive to clash over and therefore the nature of the governing relationship can serve as either an enabler or barrier to social capital formation.

Until now, there have been limited attempts to understand the role of governance on horizontal phenomena at the farm level (Neilson, 2008, Challies, 2008, Fold and Gough, 2008, Bolwig et al., 2010, Messner, 2004) and especially with regard to how participation in GVCs, constrained by the structure of governance, shape the 'cohesion' of farmers (Messner, 2004). There is a rich account in the literature on how governance influences the scope for suppliers to 'upgrade'; making better products, making them more efficiently and/or moving to different functions of the chain (Bazan and Navas-Alemán, 2004, Rabellotti, 2004, Wiegratz et al., 2007). But while this has developed a theory of governance that explains participation of farmers, it lacks a basis for exploring a theory of governance that gives explanatory power for the participation among farmers. The majority of studies in the development literature on social capital formation see it as an endogenous process internalised within a unit of analysis, or in other words the factors

influencing social capital formation among a group of farmers are contained within that group. This most likely stems from the theoretical beginnings of the concept; with Coleman's (1990) original three conditions of social capital formation all relating to internal characteristics (closure, stability and ideology) and future discussions likewise pointing towards endogenous factors (Lyon, 2000, Ostrom, 1992, Becker and Ostrom, 1995, Vollan, 2012, Pretty and Ward, 2001). While the findings cannot be empirically generalised due to the nature of case study research, it does in a small but important way contribute towards a theory of social capital formation that explores the role of a system external to a group of farmers – governance.

On a meta-theoretical level, the study highlights the role that neo-endogenous theories can play in rural development. As already alluded to, the gaps in the governance and social capital literature in many ways stem from their starting theoretical positions. The argument that GVCs represent a tool for rural development is very much characteristic of a neo-classical, exogenous approach because the fundamental claim is that the source of rural development comes from sources outside of rural spaces, ultimately reliant on the needs of consumers. This is reflected by the notion that the scope for countries and regions to thrive is increasingly dependent on their participation in GVCs governed by powerful buyers (Gibbon and Ponte, 2005, Gereffi and Lee, 2012, Reardon and Farina, 2002, Lee et al., 2011). On the other side, previous discussions of social capital have typically taken an endogenous approach to rural development because it focuses on local resources as the source of development and concentrates on capacity building at the rural level – in this case, capacity representing the stock of social capital among farmers.

Rather than taking a 'one or the other' position, the present research very much followed a neo-endogenous theory of rural development (Ray, 2002). In this model, there is an acceptance that both internal and external linkages are valuable to the process of rural development. Interestingly the argument that the analysis of GVCs needs to incorporate an understanding of phenomena at the farm level – the combination of the vertical with the horizontal, is indirectly an argument for neo-endogenous approaches to rural development. As far as is known, the present research study is one of the first to approach social capital formation from a neo-endogenous position.

8.3.2 Methodological Implications

The research demonstrated the deficiency of associational membership growth as a proxy indicator for structural social capital when used in isolation. While Serra (2011) discusses this issue, the present study is the first to empirically highlight the validity of associational membership. Put simply, what the PeruCacao GVC case study showed was that growth in associational membership can in some circumstances be a reflection of low structural social capital. It puts into doubt the notion that 'network openness' is a manifestation of strong social capital (Eisingerich et al., 2010) because a lack of barriers to joining a network can in some circumstances be the antithesis to strong structural social capital.

Ironically while the typical argument in the methodology literature is that qualitative methods lack validity (Hesse-Biber and Leavy, 2006), qualitative dimensions of social capital may actually have a better case for validity than some quantifiable indicators because of the multifaceted nature of social capital. The implication is that future research on social capital could benefit by capturing qualitative dimensions of social capital alongside quantitative measures to get a more complete picture of the social phenomenon.

8.3.3 Policy Implications

The most relevant policy implications of the present research lay within the context that the case studies were placed. This section begins by briefly reviewing foundational principles of ADP that relate to the research topic and then from this, sets out new insights to policy that the present study puts forward. Given the multiple components of ADP and the narrow focus of the study, the implications laid out here focuses on policy related to the governance of GVCs and social capital development.

An objective of ADP in Peru is to develop social capital of farmers as a means to bring farmers into collective organisations that can compete in competitive agri-food chains. Both USAID and the UNODC refer to social capital as a critical success factor (USAID, 2010, UNODC, 2013). Both institutional organisations highlight agri-food buyers as important stakeholders in ADP, not least of all because they hold the 'tickets' for farmers to access lucrative export chains that make cacao and palm oil commercially viable alternatives. Indeed given the significant economic benefits of coca production (Lupu, 2004, Léons and Sanabria, 1997), set within a context of systemic poverty in rural Peru (IFAD, 2011), the policy of bringing farmers into competitive

export chains appears to be the only realistic means to combat coca production (UNODC, 2013, Lupu, 2004). Therefore there is a dual intended outcome when it comes to value chain development from ADP, both of which are interrelated. On the one hand, farmers need to integrate into GVCs governed by more powerful buyers to win their 'ticket' to participation. On the other hand, farmers need to develop their social capital and collectively organise to be commercially viable suppliers in GVCs.

The study highlights that how farmers are governed in GVCs by buyers could be a factor in how social capital is shaped. As it currently stands, ADP provides 'broad brush' support to integration of farmers in GVCs and there is no evidence to suggest that the nature of the governing relationship is addressed from a policy perspective. While it is not disputed that market access to agri-food markets is critical, a policy implication here is that more needs to be done to support the governing relationship once market access has been achieved. On the surface, the PeruCacao GVC case study achieves all the value chain development aims of USAID (2012); improved farm-level production practices, better capacity of collective organisations and private investment. Yet underneath was an untrusting governing relationship and conflict among farmers and managers. As a consequence, there were questions on the sustainability of Cacao Collective's participation in the GVC due to the risk of farmers voting to exit the GVC or PeruCacao expelling Cacao Collective from the GVC. The PalmPeru case study however provides a positive example that can be transferred to policy recommendations. With a governing relationship that exhibited perceived equity between parties, information sharing and trust, cognitive social capital had scope to grow. In short, to minimise the risk of social capital breakdown among farmers in GVCs, ADP policy could seek to intervene in governing relationships to facilitate: 1) outcomes that are perceived as equitable by participants; 2) information flows that are two-way; and 3) the building of buyer-supplier trust. 'How' this could be achieved is a separate question of course and the mechanisms by which policy can effectively enable these outcomes is an area for future study.

The role of culture was a consistent theme throughout the research. While it is well understood that culture is a factor for social capital formation in the academic literature (Lyon, 2000, El-Said and Harrigan, 2009, Maclean, 2010, Woolcock, 1998, Coleman, 1990), it is remarkably understated in ADP policy material and poorly accounted for in the so called 'San Martin miracle' model. This San Martin miracle is a regional case study that is put up as the framework for the rest of rural Peru to follow (Cabieses, 2010) and GVC integration of collective organisations has

undoubtedly been a success in San Martin when considering the large economic gains achieved in the region through value chain development (UNODC, 2013).

However interviews with stakeholders that had interacted with farmers from different regions, as well as farmers themselves who compared their own ways of working with those originating from the Andes, suggested there were different cultural characteristics in San Martin compared to Ucayali (where case study collective organisations were based), reflecting a rich history of traditional Andean farming groups (Ansion, 2004) – characteristics that enable structural change in collective organisations. The case studies showed that existing attitudes towards social structure could be a moderating factor when considering how governance shapes social capital formation. Indeed more recent analysis of the San Martin case study shows that one component of its success lay not just with the promotion of collective organisations, but also the *willingness* of stakeholders to change (UNODC, 2013).

Adding further granularity to the findings, not only were institutional support and existing attitudes towards social structure identified as moderating factors, but there also appeared to be a relationship between the two, separate from the issue of governance. In the PalmPeru GVC, the support by the United Nations explicitly tapped into the existing social structures of farmers

– reducing set-up and maintenance costs for farmers through Minga. The findings showed that when institutional support facilitated by ADP and cultural aspects are combined in a way that is complementary, the impact on social capital formation can be very powerful. As shown in the PalmPeru GVC case study, even in the face of diminishing relevance of Minga, modern forms of structural social capital can be developed that could likewise be capitalised on from a policy perspective. The implication for ADP is that institutional support is most effective when it is combined with a rich understanding of attitudes towards social structure at the village level. In a country where micro-cultures are so prevalent, the viability of the 'San Martin miracle' to be a transferrable policy model for alternative development is questioned. The implications for policy is that granularity and nuance should be prioritised over the notion of a 'model' when it comes to supporting GVC integration and the development of social capital.

While the implications of the study questions some assumptions in ADP, it also supports the ADP in the promotion of institutional and donor assistance. In the PeruCacao case study, it was clear how fundamental this kind of support was to enable viable participation in the GVC, not just in terms of the technical aspects associated with certification, but also the workshops, training and

social technician that contributed to structural social capital formation. Furthermore, the incentive for Cacao International to create the PeruCacao GVC and include small collective organisations rather than its traditional large cooperative producing-exporting suppliers was sponsored by the rich institutional environment: as the owner of Cacao International noted "We live in an environment where there are probably too many projects available ... it would be a competitive disadvantage to not work with these kind of projects",. Likewise in the second case study, the very existence of PalmPeru and its supplier APFP, as well as the governing relationship between them, was facilitated and shaped by the United Nations (despite losing this support once commercially sustainable).

The aim of ADP to bring together a multitude of institutional and donor organisations to support the formation of social capital formation among farmers for the purpose of GVC integration is both supported and further encouraged. This is not only because it is identified in the literature as a key factor for social capital formation (Khwaja, 2009, Grootaert and Narayan, 2004, Janssens, 2010, Vasilaky, 2013), but based on the novel contribution of the present study, such institutional and donor support may moderate the influence of governance on social capital formation in GVCs.

8.4 Limitations

The main limitation of the present study was one of methodology. It was strongly argued in the methodology chapter that a qualitative case study approach was best placed to investigate the research problem because of its exploratory nature and the intended deliverable of theoretical propositions that could be further tested in future research. It is certainly argued that the choice of a qualitative case study method was vindicated based on the richness of the findings. Ultimately any research question that begins with *why* or *how* is best suited to a qualitative, case study approach (Yin, 2009). Nevertheless, as with any chosen method, a trade-off exists that reveals limitations to the findings.

The key limitation related to the theoretical limitations of such an approach is the inability to *empirically* generalise case study research even though the propositions can be generalised on an analytical level (Bryman, 2008). The empirical findings of case studies provide a rich understanding of the micro level, but less so at a macro level as would have been the case in a large quantitative study. As a result, empirical findings from the present study do not test a

model for governance and social capital formation and consequently the theoretical implications are far from conclusive and therefore warrant further investigation by others. Considering specifically the association between governance and social capital formation, there may also be factors moderating the relationship that were not identified in the present research, suggesting that not only testing but further exploration could also add new insight, especially when placed within a context that contrasts with rural Peru. In short, the study should be regarded as a small but important step in the right direction in building a novel theoretical understanding of governance and social capital formation.

In addition to the limitations of the theoretical implications, and again related to the choice of methodology, is the narrow scope of case studies compared to the wider ADP which involves a large number of farmers and value chains. While there is no published data on the total number of stakeholders who have been impacted by ADP, the scope and scale is clearly vast – in 2010 alone, \$500 million was invested by international development agencies as part of the program (USAID, 2012). The ability to generalise findings to wider policy implications is limited and should be taken with caution. Despite this, the case studies do provide rich examples of ADP in action and therefore while they cannot be generalised to every case, they do highlight issues that can be applied to other case studies where similar circumstances are evident – a concept known as case-to-case transferability (Yin, 2009). The propositions developed from the study can be seen as an attempt to provoke thought and discussion of governance and social capital concepts in ADP policy circles.

8.5 Recommendations for Future Research

The nature of the study was exploratory in that the research aim was to 'open the box' on governance of GVCs and social capital formation among farmers. Given that an outcome of the study was the presentation of propositions, the next logical step would be a more formal testing of these propositions to ultimately determine whether the theoretical contributions are proved or nullified. Therefore one recommendation for future research would be to apply a study mirroring a theory testing methodology that has the power to generate more robust empirical generalisations (Bryman, 2008). This would contribute towards further developing a theory of governance and social capital formation in GVCs. In addition, it would also go some way in moving governance research beyond single case study methods as used in the present study as well as a large number of previous studies (Tran et al., 2013, Weijland, 1999, Mutersbaugh, 2005,

Roy and Thorat, 2008, Shiferaw et al., 2008, Neilson, 2008, Fischer and Qaim, 2012, Challies and Murray, 2011).

As already mentioned, there may also be opportunities of further exploratory research in the topic of governance and social capital formation, especially in different case study contexts. While the present study was purposefully concentrated and in-depth to effectively investigate the two concepts, it is probable that there are other phenomena that were not evident in the case studies. Outside of a Peru/ADP context, different dynamics may be present. Social capital is a concept that is uniquely context specific (Cleaver, 2005, Bebbington, 2007, Serra, 2011) and theories of its formation need to be adapted to take this into account – Mosse's (2006) study on the implications of the Indian cast-system on the social capital of farmers typifies the significance of context. As a result, a recommendation for future research is that supplementary exploratory studies in different contexts to Peru and ADP should be pursued.

For the purpose of theory building, different contexts provide an ideal area for new research. However for ADP policy, there is also value in undertaking further research on social capital formation among farmers in case study GVCs that incorporates the multi-dimensional nature of the concept. According to USAID (2010), ADP has created social capital among rural stakeholders: "Evidence of social capital generated by ADP includes the investments of community members in associations and cooperatives to improve training, acquisition of production inputs, and improved and value added post-harvest and marketing activities of their products" (p. 19-20). This could be argued as a crude view of social capital, missing the state of the structural elements that aid cooperation and the level of trust among farmers (Uphoff and Wijayaratna, 2000) and ultimately being more of a platitude than an understanding. Although the findings themselves cannot be empirically generalised, the present study highlights the value of a nuanced, in-depth approach to social capital. A recommendation for future research within the context of ADP would be to follow a more nuanced approach to evaluate whether social capital, in all its complexity and multiple dimensions, truly has been formed as a result of ADP.

8.6 Concluding Remarks

The development literature has up to now overlooked the notion that the social capital of farmers in GVCs is enabled or constrained within the structure of governance, relying mostly on factors that are contained within groups of farmers and considering everything outside of that

system to be inevitably detrimental or negligible. Groups of farmers represent a structure of participation and clearly there are endogenous factors that form social capital. But, what the present study highlights, is that there are other structures of social behaviour which farmers participate in that may influence social capital formation. The GVC represents such a structure - a highly significant one to current rural development strategies, with a multitude of governing mechanisms that shape farmers' participation.

It is hoped that the present study provokes a discussion on two levels. Firstly, there is desire in development circles to bring farmers into governed GVCs (Shepherd, 2007); however there needs to be a greater consideration of the consequences of such a strategy at the rural level — the integration of the 'vertical' with the 'horizontal'. Secondly, the development of social capital theory needs to be more innovative in its thinking to avoid hitting an impasse. Social capital has been described as the 'missing link' in the development discourse (Grootaert, 1998), yet ironically, social capital is missing links to make it a more complete theoretical model. Future advancements in social capital theory will require fresh approaches that push the boundaries of present thinking that has thus far been characterised by rigidity.

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Appendix

Example interview transcript: Farmer from Association of Palm Fruit Producers

Interviewer: First of all, I would like to ask for permission first to record, we are now doing... well, he is doing a study on the creation of social value through palm oil plantations, he wants to understand how farmers work within APFP, in this case, but we are taking a look at other cases and organisations as well, so he wants to understand how you work, the information will be anonymous, it is not necessary for you to tell us your name. Well, to begin with, tell us how many palm oil hectares you have?

Speaker: I have 20 hectares.

Interviewer: 20, do you hire workers?

Speaker: We have workers, but we don't have stable workers.

Interviewer: Permanent workers. How many do you hire a year?

Speaker: What I normally do are contracts and I pay them. They ask how many hectares I want

them to work for and if it is convenient, I give to them and pay them.

Interviewer: How many times do you hire them per year?

Speaker: Well, twice a year.

Interviewer: Twice? How many workers? One or two?

Speaker: It is normally carried out with two.

Interviewer: Two? But are you permanently working with your family? How many of your family

help you?

Speaker: Me and my wife, my children.

Interviewer: How many children?

Speaker: Four

Interviewer: How long have you been cultivating palm? For how many years?

Speaker: We have been cultivating since 1992.

Interviewer: 1992? Why did you decide to cultivate palm?

Speaker: Because there was not anything then, we used to cultivate coca.

Interviewer: Did you use to have coca?

Speaker: Yes.

Interviewer: How did that change? What happened?

Speaker: An NGO [by "NGO", respondent is referring to the United Nations] came to offer it.

Interviewer: An NGO came?

Speaker: It came in order to cultivate palm.

Interviewer: Did the NGO give you something?

Speaker: The NGO gave us a greenhouse, plants.

Interviewer: Seeds?

Speaker: Seeds, plant, they gave us everything, the government also helped us. (Inaudible) That

was not here...

Interviewer: Will you serve him?

Speaker: (Farmer speaking with a community member) The NGO used to help us, we used to

work in groups, we used to do "minga" before, among five or six of us.

Interviewer: Did you use to do "minga" with the NGO?

Speaker: Yes.

Interviewer: How did the NGO help you?

Speaker: They used to give us food.

Interviewer: Food. They gave you plants and seed. How many hectares did you install?

Speaker: Five.

Interviewer: Five.

Speaker: People here did not want to cultivate palm, they used to cultivate coca.

Interviewer: Why did you decide to do it then?

Speaker: I thank an engineer, he was very friendly, he suggested me to cultivate it, he motivated

me to cultivate palm, we'll do anything possible to get plants for you, and he used to motivate

us.

Interviewer: Do you have any other crops apart from palm?

Speaker: Yes, we cultivate tapioca and maize.

Interviewer: Tapioca, maize, what else?

Speaker: Banana, what we normally eat.

Interviewer: How long have you belonged to APFP?

Speaker: We are the first members, the founding members.

Interviewer: What year did that begin?

Speaker: 1995 or 1996.

Interviewer: 1996.

Speaker: Yes, we are the first founders, since 1996, we have worked a lot in that factory.

Interviewer: Did you belong to another organisation before that?

Speaker: No.

Interviewer: It was the first one then. Why did you decide to become an APFP member?

Speaker: This organisation has got the point to get everyone together while cultivating palm, we

wanted to belong to an association.

Interviewer: (Pause) Are you an APFP shareholder?

Speaker: Yes.

Interviewer: Has it been easy or difficult to be a shareholder?

Speaker: Difficult, whenever it... the association did not have money, but the NGO was giving us palm before, they supported us with the factory, we did not have money, but there was already a president, he said if you all work; all members... Why? To have the shares and working in the

factory...

Interviewer: What has been easy or difficult while being a

shareholder?

Speaker: Have the five hectares and be a member.

Interviewer: Ok didn't you have your 5 hectares before?

Speaker: We already have them, yes.

Interviewer: Why else?

Speaker: How can I say it...? PALMPERU's president and the directive used to say we should have more shares, and I would say why would I have more? We did not know, I did not know what profit and shares were... and they told us afterwards why...

Interviewer: Did they carry out trainings?

Speaker: Yes, the company would bring trainers and the company would bring an NGO to train $\,$

us...

Interviewer: What benefits have you received while being a shareholder?

Speaker: Every year, according to what the company profits, we are given something.

Interviewer: You receive a profit at the end of the year then? (Interviewers speaking English)

When you deliver your product to PALMPERU, what requirements are you asked for? For

example, requirements; to deliver a ripe product, are that easy or difficult to fulfil these?

Speaker: This was not achieved during the first years, but most of the members are now

delivering it. The company is telling us to do so, if we deliver our ripe bunches, we are working

well, delivering...

Interviewer: What are the requirements that PALMPERU asks for?

Speaker: What for?

Interviewer: Fruit delivery...

Speaker: Be a member...

Interviewer: Whenever you deliver the product to PALMPERU, what do they look for on the

fruit?

Speaker: Ripe.

Interviewer: Ripe? What else?

Speaker: It should be ripe mostly...

Interviewer: Ripe.

Speaker: We harvest, we normally wait for 8 days until we do this, if we do this after 8 days, we

get a lot of fruit... sometimes grains are rotten.

Interviewer: (Interviewers speaking English) are you asked to use a specific fertilizer? Do you use

one or the other?

Speaker: Yes, we fertilize every year.

Interviewer: (Interviewers speaking English) what does PALMPERU require for production? Do

they ask you for a specific process for your palm?

Speaker: We have a special technique, sometimes they are in our farm, and we need to do a

type of fertilization. They teach us.

Interviewer: (Interviewers speaking English) has it been easy or difficult to fulfil these

requirements for you?

Speaker: Of course, in order to produce palm well, we have to listen to PALMPERU technicians

Interviewer: But, has it been easy for you or a bit difficult?

Speaker: A bit difficult, because we normally work... How can I say...? "Champaz"

Interviewer: What do you mean? You don't finish? Or...

Speaker: We work in this way... How can I say...? You cultivate and you let it grow... If it

produces, it will do so...

Interviewer: (Interviewers speaking English) How are you communicated about these

requirements asked by PALMPERU? Documents? Face to face?

Speaker: That is why the company has its technicians, they communicate us. Through them

Interviewer: Face to face?

Speaker: Yes.

Interviewer: Is not there a document where that is stated?

Speaker: No, they rarely send a document...

Interviewer: Not where it states how the fruit must be ripe? Do you think they can communicate

that better or is it all right like that?

Speaker: No, we communicate well, when they come.

Interviewer: Face to face. (Interviewers speaking English) What is your opinion about

PALMPERU? What are they doing well and what are they doing wrong?

Speaker: PALMPERU has emerged a lot, it has grown a lot from what it was before, they have

another plant under construction, building more green houses, more palm green houses, and

the company is growing and working.

Interviewer: (Interviewers speaking English) anything good or bad about PALMPERU? What do

you think? Anything else apart from that? (Interviewers speaking English)

Speaker: What can I say?

Interviewer: Anything negative?

Speaker: We are normally in the farm, the company works, there is a directory, there are also

two representatives we choose that go to PALMPERU and find out and then they come and

communicate this to us during an assembly.

Interviewer: Have they told you anything negative so far?

Speaker: No.

Interviewer: (Interviewers speaking English) what is your opinion about the palm oil buyer?

Speaker: The ones that buy from PALMPERU?

Interviewer: Yes, what do you think about them? What are they doing well or what are they doing wrong?

Speaker: They buy all...

Interviewer: Oil?

Speaker: Oil. They say prices has gone down.

Interviewer: Prices are down?

Speaker: 200, now, it has gone down a lot.

Interviewer: Per tonne?

Speaker: Yes, per tonne. Interviewer: Dollars?

Speaker: Yes.

Interviewer: (Interviewers speaking English) what do you think about the price being low? Speaker: According to PALMPERU, they say oil price goes down because of the international price.

Interviewer: (Interviewers speaking English) How were you informed about that?

Speaker: How were we informed? They come here; they come every five or six months, they come down from the base, the manage and everyone comes here and they inform us here in an assembly.

Interviewer: From PALMPERU or APFP?

Speaker: PALMPERU

Interviewer: Every six months?

Speaker: Yes.

Interviewer: Twice a year?

Speaker: The come to inform us, the manager comes, the accountant comes, and everyone comes and informs us, they say why the price has been low.

Interviewer: (Interviewers speaking English) How do you feel when they inform you?

Speaker: Happy.

Interviewer: (Interviewers speaking English) If you were not given the information by PALMPERU? Would you have felt different?

Speaker: Of course.

Interviewer: How would you feel if you are not informed?

Speaker: Of course, sometimes you don't know about what is happening.

Interviewer: (Interviewers speaking English) can you describe how were you first introduced as a member in APFP, can you tell me the story? How did you become a member?

Speaker: In order to be an PALMPERU member, they asked for requirements, first of all to become a member, they asked then our identification card, they asked for...

Interviewer: But before that, did you go by yourself to APFP? Did they come here?

Speaker: They came here to inform us.

Interviewer: They came here?

Speaker: They came and informed about requirements and public registration

Interviewer: And you decided to become a member then...?

Speaker: Yes, we accepted to give all the documents they asked for, we fulfilled these requirements and became members.

Interviewer: (Interviewers speaking English) He says you would be a bit upset if PALMPERU would not inform you properly. Can you explain further what type of information is important for you? Can you explain a bit more?

Speaker: Mostly about negotiations they have had.

Interviewer: Negotiation. (Interviewers speaking English) What else? (Interviewers speaking English) Why is it important for you? (Interviewers speaking English) Why is the information that is provided important for you?

Speaker: That is how we get to know, the prices they sell with, prices they buy for, how much money they spend, and that is why...

Interviewer: (Interviewers speaking English) He wants to know why would you be angry if you don't receive the information, so for him to understand better, can you tell us why it is important for you to receive the information (Interviewers speaking English) For example... If you are not given information about the price being low, you would be upset, if you are given information, you would be happy, but why?

Speaker: What can I say...? It is good to be informed by them, but when the oil price is low, they come here and tell us what is happening, members ask why and they are told the reasons why oil price is low. There is oil from Colombia, Ecuador, and Malaysia, there is competition, and they say it is cheaper there and they don't pay taxes, and we pay everything.

Interviewer: (Interviewers speaking English) he wants to understand why sometimes you are angry and why sometimes you are happy with information? Why?

Speaker: (Silence) that is the reason lady.

Interviewer: (Interviewers speaking English) what benefits have you received from the organisation so far? From all these years? What benefits have you received?

Speaker: Profit the company has every year.

Interviewer: They have every year, what else?

Speaker: We are given plants.

Interviewer: For free?

Speaker: Yes, we are given for 3 hectares.

Interviewer: Every year.

Speaker: Yes, it depends on how much the company produces and if they are close from the

green house. Every member gets a different quantity per hectare.

Interviewer: They give you these for free? What else?

Speaker: They sell to us everything we need for the farm.

Interviewer: What is sold for example?

Speaker: What is cultivated, they sell fertilizers; they deliver it and sell it.

Interviewer: (Interviewers speaking English) what benefits would you like to receive that you

have not received so far? What would you like to receive that you haven't...?

Speaker: We would like to... We ask the company to check if it is possible to construct a house

for each of us.

Interviewer: A house to live?

Speaker: Yes, for each of the members.

Interviewer: Here?

Speaker: Yes, here in the community, that is what us members are waiting for...

Interviewer: What else? Anything else you would like?

Speaker: (Silence)

Interviewer: (Interviewers speaking English) how often do you have meetings?

Speaker: Every month.

Interviewer: Each month, do you do workshops as well?

Speaker: No, just meetings?

Interviewer: Every month? (Interviewers speaking English) Are they here?

Speaker: Yes, here. We ask a lot, the company to train us with workshops, these normally take place in the village or the city, whoever is interested goes there, but most of members don't go Interviewer: Why don't you go? Is it too far?

Speaker: It is too far, it could also take place here, they can organise a lunch and be there all day Interviewer: (Interviewers speaking English) How do the meetings that take place every month here help you? The monthly meetings.

Speaker: We are informed in the meetings; we are informed whatever happens in the local organisation, what they are doing, that is doing it, what the company is doing. What we are asking for, we are informed about all of that...

Interviewer: (Interviewers speaking English) what is your opinion about APFP's directive? What do you think about them? What are they doing well and what are they doing wrong? (Interviewers speaking English) We will not tell them what you tell to us.

Speaker: APFP is building a factory and they are investing money on that...

Interviewer: What else are they doing well and wrong? What do you think about the directive and directors?

Speaker: The directive has recently changed.

Interviewer: What do you think about the prior directive?

Speaker: They have not done anything.

Interviewer: They haven't done anything?

Speaker: Nothing is to be seen.

Interviewer: What else have they done? For example?

Speaker: They must finish that factory.

Interviewer: (Interviewers speaking English) what do you think about PALMPERU's manager?

Speaker: From what I have heard, he is working well, he is a good manager

Interviewer: (Interviewers speaking English)

Speaker: He recently joined, we did not have a manager, and an accountant was managing the company.

Interviewer: (Interviewers speaking English) how is the manager working well?

Speaker: because he is now doing everything we have been informed about, he is informing us.

Interviewer: He comes all the way here?

Speaker: Yes, he suggests what we should do...

Interviewer: (Interviewers speaking English) How have you learnt about responsibilities and rules

in APFP? Have you learn about this in workshops or trainings?

Speaker: Workshops.

Interviewer: In workshops?

Speaker: Years ago.

Interviewer: Have they come here? Speaker: Yes, they have come here.

Interviewer: In workshops and training. Also talking to other farmers?

Speaker: Also. Yes

Interviewer: (Interviewers speaking English) do you feel you need to know more about

responsibilities and rules in APFP?

Speaker: Yes.

Interviewer: Why?

Speaker: Because I just would like to learn more.

Interviewer: (Interviewers speaking English) How do farmers within you "cacerio" help each

other?

Speaker: We do "minga"

Interviewer: Do you do "minga here"?

Speaker: Yes.

Interviewer: (Interviewers speaking English) Why do you do "minga" here?

Speaker: Because there are not any workers who want to work, or some of them want to get more money that we can afford. We suggest doing "minga"; tomorrow we go to someone's

farm, the day after that we go to another one.

Interviewer: They want to charge more.

Speaker: They want to charge 30 soles.

Interviewer: (Interviewers speaking English) how often do you talk to other farmers?

Speaker: We speak every day.

Interviewer: Every day?

Speaker: We talk about different topics every afternoon, is production low? High?

Interviewer: Is that related to agriculture? What else?

Speaker: About the company. What do you know about the company? What do you know about

APFP? Someone must know something, so they inform us.

Interviewer: You speak to other farmers, what benefits if any are there when you speak to other

farmers.

Speaker: We get to know what they are doing and what I am doing. We find out about each

other.

Interviewer: Is that information new for you?

Speaker: No, we ask each other every day what people are doing.

Interviewer: But what? What topics?

Speaker: I am cultivating my corn, my palm.

Interviewer: What do you do with that information afterwards?

Speaker: I think, if he is cultivating something special, why am I not doing this? I should do it too.

If they are cultivating more things, they will earn and I can earn more.

Interviewer: (Interviewers speaking English) you say... Going back to the "minga" topic. Did you

use to do that in the past too? "Mingas" Did you use to do that before? Did you create it or has it

always been around?

Speaker: No, always.

Interviewer: (Interviewers speaking English) about farmers from outside your "cacerio", do you

speak about the same topics? With other palm producers, for example.

Speaker: Yes.

Interviewer: Do you speak about the same? (Interviewers speaking English) Do you get different

information from farmers from other "cacerio"?

Speaker: Yes, some of them tell us they are cultivating cocoa, "cocoa is less expensive", "there is

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too much work with palm", I cannot cultivate a different crop, I have been doing this for a long

time.

Interviewer: (Interviewers speaking English) any useful you have received? (Interviewers

speaking English) New and useful?

Speaker: No.

Interviewer: (Interviewers speaking English) we are nearly finished. (Interviewers speaking

English) What is your opinion about NGOs?

Speaker: Some NGOs are good.

Interviewer: They are good.

Speaker: they have come here, we never thought there would be a school in this little town.

Thanks to PALMPERU and APFP who have pressured, we have a world-class school here. That

has been carried out through an NGO.

Interviewer: What do they provide?

Speaker: Sport, they come every day; there are teachers from Lima that are training children,

from five to 17 years old.

Interviewer: five to 17 years old, how are you feeling about that?

Speaker: Very happy, because of football especially.

Interviewer: (Interviewers speaking English) Why is it good?

Speaker: It is sport what they should do instead of other activities. Young people mostly

Interviewer: (Interviewers speaking English) Are NGOs bad sometimes? He wants to know

words. Is there anything wrong NGOs have carried out?

Speaker: I always listen to that, some of them have stolen money, they don't do anything

beneficial for people, and they only come here for money. That's what I have heard

Interviewer: (Interviewers speaking English) can you describe in detail about stealing? How do

they steal? What have you listened to? What is the story?

Speaker: During projects, they steal the money during projects.

Interviewer: Do they take the money?

Speaker: Of course.

Interviewer: (Interviewers speaking English) who told you about this?

Speaker: Leaders comment about it sometimes, they come here and tell us. (Inaudible) They do

come here. We wonder what they do with that money, why don't they invest the money in

"cacerios", why don't they invest there...

Interviewer: (Interviewers speaking English) what do you think about the government?

(Interviewers speaking English) What do you think about the local government? The local

government? What do you think?

Speaker: You know... Every leader has its good and bad, some persons are liked some are not, some work, some don't work at all, some say they are not doing anything. Lots of farmers have been given palm projects by the regional president.

Interviewer: Have you also been helped?

Speaker: Not me, other farmers that have not had the chance. He has given them five palm

hectares.

Interviewer: (Interviewers speaking English) for farmers who did not have them before?

Speaker: Yes, they are doing more green houses.

Interviewer: (Interviewers speaking English) who do you trust more? NGOs or the government?

Speaker: (laughter) NGOs.

Interviewer: NGOs. Why?

Speaker: Because they do a project and they come here and they are looking at their work, but

government from here, they come and go, they sometimes don't carry out their work well

Interviewer: (Interviewers speaking English) what cultural differences if any have you found from

people who come from the highlands and the jungle? Regarding work.

Speaker: Of course.

Interviewer: For example?

Speaker: People like me who come from the jungle, we have a different working style, and people who come from the highlands they work, how can I say..., they plough land in their farm, they do it very low, and we do it differently, when there is a summer, we don't do it like that...

Interviewer: Are you saying that they work a bit more?

Speaker: Yes.

Interviewer: (Interviewers speaking English) In terms of cooperation? Who cooperates more?

People from the jungle or from the highlands?

Speaker: Whenever it is time to cooperate we do so, we support each other and we do so

Interviewer: (Interviewers speaking English) when a farmer from the highlands has to support a

farmer from the jungle... (Interviewers speaking English) Or for example, when "minga" is

carried out, do they cooperate?

Speaker: Yes.

Interviewer: (Interviewers speaking English) do you feel closer to people from the jungle or the

highlands?

Speaker: They are all they same for me, we are all the same.

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Interviewer: (Interviewers speaking English) how long have you been a farmer?

Speaker: Since I was a child.

Interviewer: All of your life? Is this the "cacerio", the Machida Chula "cacerio"?

Speaker: Yes.

Interviewer: What part of Peru are you from?

Speaker: From San Martin.

Interviewer: San Martin? Do you feel closer to the jungle then? The jungle or the highlands?

Speaker: From the jungle.

Interviewer: (Interviewers speaking English) thank you for your time; we appreciate your

information a lot.

Photographs during fieldwork

Homes of Cacao Collective farmers



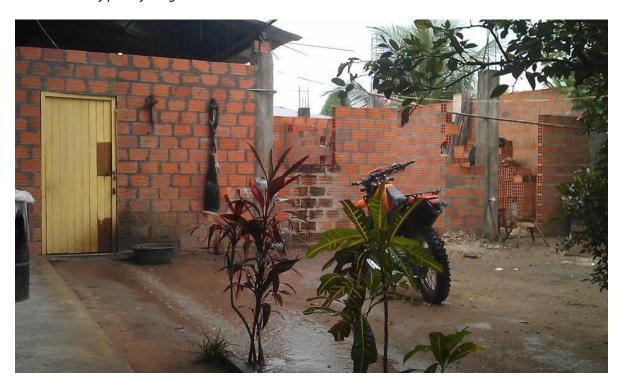
Village with high prevalence of cacao growers



Drying cacao beans



House of palm fruit grower



Palm fruit estate

