Claiming Local Autonomy through Global Markets

Examining how Small-Scale Cocoa Farmers in Ghana use Global Cocoa Markets to claim autonomy on a Local Scale.

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Abstract

Food sovereignty discourse has been developed amidst growing discontent with world trade for infringing upon small-scale farmers’ right to autonomy over their food production and consumption. However the rejection of market integration by food sovereignty proponents has been criticised for neglecting the role world trade plays for millions of small-scale farmers. This thesis adds to the development of food sovereignty discourse by assessing the impact of value chain collaboration upon household livelihoods, with a focus on human and social capital; and autonomy, as a dimension of food sovereignty. We integrate a value chain perspective with the sustainable livelihoods approach to critically analyse the effects of value chain integration for small-scale cocoa farmers in Ghana. This gives focus to small-scale cocoa farmers’ perspectives, without ignoring other significant actors and institutions.

Data collection used mixed methods, with a comparative case study approach on two different cocoa buying companies, the Produce Buying Company (PBC) and Armajaro. This includes observations, survey data, key documents and interviews with cocoa farmers and other chain actors including buyers, managers and government officials. The findings detail current chain actors and institutions as transforming structures and processes respectively. A distinction between basic and advanced value chain collaboration is made, in reference to the minimum versus additional standards for cocoa production and the latter investing in direct relationships with farmers. Advanced collaboration initiated by Armajaro is found to have a greater positive impact on farmers’ livelihood assets, with the greatest change coming from human capital. Autonomy is also seen to increase within advanced collaborations, despite the additional standards that farmers must follow. This is mainly due to households’ increased ability to make informed decisions, benefitting from knowledge transfer within value chains. We conclude that willingly giving up autonomy over the production of cocoa is in itself an autonomous decision, leading to better livelihoods for those taking part in advanced collaboration with buying companies.

The thesis lays the foundation for a reflection on, and development of, food sovereignty discourse and how it can be adapted to include those who rely on global value chains for their livelihoods. The current discourse, which rejects value chain integration, cannot match the demands of small-scale cocoa farmers in Ghana, creating the need for reflection on the core principles proposed by food sovereignty.

Keywords:
Value chain collaboration; small-scale farmers; cocoa sector; autonomy; food sovereignty; Ghana
Preface

The process of writing this thesis has been a humbling experience, where I have benefitted no end from the generosity of all those I have worked with. In giving their time, expertise and ideas I have learnt a great deal more than I can squeeze into this thesis. There are a few people I would like to thank in particular, but I hope that everyone who has helped in any way is aware of my gratitude.

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Acronyms and Abbreviations

Cocobod – The Ghana Cocoa Board
DFID – Department for International Development (Based in the UK)
FAO - Food and Agriculture Organization of the United Nations
FSM – Food Sovereignty Movement
GSS – Ghana Statistical Service
GOPDC - Ghana Oil Palm Development Company
LBC – Licensed buying company
MOFA – Ministry of Food and Agriculture
MNC – Multi-national Corporation
PBC – Produce Buying Company
PPP – Public-Private partnership
PPRC – Producer Price Review Committee
SLA – Sustainable Livelihoods Approach
UNDP – United Nations Development Programme
UENR – University of Energy and Natural Resources (Based in Ghana)
UvA – University van Amsterdam (Based in the Netherlands)
VCC – Value Chain Collaboration

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1. Introduction

Agriculture is vital for the livelihoods of many of the world’s most vulnerable families, and through the production of agricultural commodities, they are connected to consumers from across the globe (Bitzer et al., 2011). Whilst local markets are vital to the day-to-day livelihoods and resilience of individual nations’ populations, global markets give farmers access to export cash-crop markets, whilst creating huge potential for profits for international traders (World Bank, 2007; UNDP, 2012). Agricultural production is consistently a political priority, with governments balancing the need for food sovereignty against calls for integration with international markets (Arthur, 2012). Recent developments have seen a shifting balance towards greater integration, with international food traders and processors increasing their influence upon farmers seeking to control the supply chain and protect profits (Laven, 2010). It is the nature of these shifts, and the effect they have on households producing agricultural goods, that should be the main focal point of subsequent research and policy; rather than just the quantity of goods produced (Laven & Boomsma, 2012). With large business taking a greater interest in the activities of small-scale farmers, we should be able to answer the questions of why this change is happening, what effects this has on the ground and what the future impacts may be on farmers livelihoods.

This section will first introduce the historical context to the research, before focussing on the cocoa sector in Ghana, the subject of this study. A brief discussion of some of the core theoretical concepts will be introduced, allowing the reader to gain an insight into the academic contribution this research will make. This will be summarised in the research objectives, before the setup for the complete thesis is given.

1.1 Background to the research

The modern agricultural system has been heavily shaped by developments first starting in American food markets in the 1930s, as capital-intensive farming methods started to gain control over labour (Amanor, 1999). This was strengthened by a shift from strong governmental regulation to trade liberalisation, with the aim of achieving growth through global markets (Peet & Hartwick, 2009). This move was seen as the solution to future food productivity problems, with the World Bank (1975) seeing food production problems in terms of lack of access to inputs and insufficient mobilisation of capital, holding the view that rural development was “concerned with the modernisation and monetarization of rural society, and with its transition from traditional isolation to
integration with the national economy” (p.3). There are few who object to the benefits that can be realised through greater access to global markets (Stiglitz, 2007), for example innovations in plant breeding, the use of petro-chemicals and farming machinery allowed yields to be dramatically increased when first introduced (Amanor, 1999). However it is clear that many benefits are not realised by small-scale farmers, with key critiques of the current system including the bias of the ‘rules of the game’ in developed countries’ favour and the loss of sovereignty of the state (Stiglitz, 2007); the implementation of inappropriate economic values onto heterogeneous contexts (Stiglitz, 2007); farmers becoming locked into markets, their livelihoods reliant upon firms supplying them with inputs and providing demand for produce (Amanor, 1999). In response, the food sovereignty movement has developed, putting emphasis on the need for smallholder resilience and autonomy (Altieri, 2009). To varying degrees, this discourse rejects the idea that development should come through increased market integration, where the risks of dependence are highlighted and the lack of autonomy heavily criticised (Patel, 2006; Holt-Ginénez and Shattuck, 2011; Holt-Giménez and Altieri, 2013).

This increased market integration has been coupled with deregulation and a trust in market forces to provide efficiency. Governments have a smaller role in regulating value chains, with private companies taking on many of these roles (Laven, 2010). International traders and processors of agricultural produce, now more aware of the risk of supplier failure and maintaining quality standards, began increasing their influence over primary producers and their control over the value chain. One symptom has been a rise in contract farming with strict conditions placed upon producers (Amanor, 1999), giving agricultural producers very little autonomy in the production of their goods and increasing their reliance on private firms. Questions have been raised about both the effect this has had on smallholders’ agency to reposition themselves within value chains with limited ability to bargain on the international stage and how strengthening rural smallholders positions within value chains can improve their livelihoods (Eagleton, 2005). The same study, written for Action Aid (Eagleton, 2005) called for increased regulation, holding multi-national corporations (MNCs) responsible for “draining wealth from rural communities, marginalising small-scale farming, and infringing people’s rights” (p. 4).

More recently, there has been increasing focus from consumers about the quality of process (Laven, 2010). Big businesses are aware of the need to invest beyond the chain to maintain a sustainable supply from healthy, profitable farmers. This has led to new partnerships (Laven, 2010), or value chain collaboration (VCC) as referred to in the following thesis, to improve farmers’ livelihoods, increase their participation in value
chains, and provide a stable base of producers for international markets (Bitzer, 2011; Ros-Tonen et al., in press). VCC is defined as “voluntary associations between different actors in a chain, including producers and buyers and often, but not necessarily, other societal actors” (Ros-Tonen et al., in press: 5)

The impacts of VCC are only now being documented, and in-depth studies are limited. Many studies have focussed on the economic gains (e.g. KPMG, 2011) but have yet to describe the impact on farmers’ livelihoods. Further, despite the growing theoretical literature surrounding food sovereignty, there is an even greater lack of illustrative research highlighting how food sovereignty discourse can be applied ‘in the field’. Whilst this knowledge gap remains, we will be unsure of the different impacts that VCC can have on smallholders, whilst the food sovereignty discourse remains a theoretically abstract concept open to criticism about its practical application to small-scale farmers. This thesis uses the cocoa sector in Ghana to both highlight the effects of two different types of VCC, and apply the autonomy aspect of food sovereignty to the Ghanaian cocoa farmer context.

The cocoa market in Ghana is a prime example of a global value chain, where beans are primarily exported for processing into cocoa butter, liquor and powder for chocolate confectionary, but also for use in cosmetics and beauty products (Barrientos et al., 2008). First introduced during the late 19th century (Howes, 1946), cocoa exportation has grown to become the country’s most important agricultural export, and a vital part of Ghana’s future development (Kolavalli & Vigneri, 2011; World Bank, 2013), with the livelihoods of 30% of the population depending upon the cocoa sector (Gockowski et al., 2011).

However, in contrast to all other cocoa-producing countries, Ghana only partially liberalised its cocoa market (World Bank, 2013). The government body, the Ghana Cocoa Board (Cocobod), continues to be a major actor with control throughout the export value chain, obtaining high quality produce, but low average yields (Kaplinsky, 2004). Private companies work within constraints set upon them as licensed buying companies (LBCs), with set prices and minimum quality standards (Laven, 2010).

With the Ghanaian government highlighting cocoa as having the potential to provide economic growth to the country (Barrientos et al., 2008) and worldwide chocolate sales projected to increase by 6.2% (Terazono, 2014), both the state and cocoa traders have strong interests in investing in productive capacity of small-scale farmers; who are responsible for the majority of cocoa production in Ghana (Barrientos et al., 2008). The

1 When defining autonomy, we use the definition by Oxford University Press, as the "freedom from external control or influence"
ability to meet rising demand for both standard and certified cocoa is a challenge, but even the ability to maintain current levels of production face risks from current low levels of land productivity (Mohammed et al., 2012); an ageing farmer population and lack of youth entering farming (Barrientos et al., 2008); and high costs of production (Daniels et al., 2012).

Developments in the cocoa sector since the 1990s have resulted in the private sector paying a greater role in the Ghanaian cocoa value chain (Essegbey & Ofori-Gyamfi, 2012). Ghana has explicitly promoted partnerships with the private sector (MOFA, 2007) to address the need for a sustainable and profitable cocoa market (World Bank, 2013). These partnerships can, however, be influenced by external motives, for example commodity traders seeking to guard against supplier failure. There are currently examples of both basic VCC, with buying companies simply meeting minimum requirements set by Cocobod, and advanced VCC, where buying companies invest in direct relationships with farmers, whilst implementing additional standards for cocoa production.

By looking at the specific case of cocoa farmers in Ghana, we gain access to a well-established industry with sufficient previous experience with VCC to provide a basis for an analytical perspective on the impacts of these programmes on farmers’ livelihoods. The current trends of increasing VCC in the Ghanaian cocoa chain match those seen around the world, but have the added advantage of occurring within an environment that is relatively homogenous, due to governmental controls on minimum price and quality standards. This creates an environment that is conducive to a comparative study of basic and advanced VCC, where differences and similarities in the effects on farmer livelihoods will address gaps in current knowledge on the set-up and characteristics of VCC, as well as providing insight into how they can be designed to maximise the positive impacts for small-scale farmers (Bitzer et al., 2011).

1.2 Research questions

Against the background of Section 1.1, this study aims to address the following research question:

How do differences in value chain collaborations (VCCs) between private companies and small-scale cocoa farmers in Eastern Ghana affect households’ autonomy over their livelihoods?
Sub-questions:

1. What are the characteristics of the VCCs studied in terms of actors and their interests, institutional arrangement and activities?

2. How do the VCCs studied affect farmers’ livelihood capitals, particularly their social and human capital?

3. How do explicit and implicit constraints affect households’ autonomy within both basic and advanced VCCs?

4. What are the implications of the findings in terms of food sovereignty?

The first three sub-questions are set out to answer the main research question, by first addressing the characteristics of the basic and advanced VCCs studied, before analysing their impacts on livelihood capitals and autonomy. Complex relationships between livelihood capitals and the ability to claim autonomy will be explored, allowing this paper to explore to the affects VCC has on small-scale farmers’ autonomy.

The final sub-question goes beyond the original research question, requiring a theoretical approach, comparing the findings of the research to food sovereignty discourse. The presented case can be used as an illustration of various aspects of food sovereignty, and will lead on to recommendations for future research and policy.

1.3 Thesis setup

This chapter has introduced the background to this research, highlighting the rationale behind the given research questions and the need for them to be clearly answered.

Chapter two outlines the theoretical framework. Aspects addressed include the ability to assess farmers’ livelihoods; the methods of analysing these livelihoods within a global value chain; and the positioning and relevance of the research within food sovereignty discourse. Finally the main concepts of the research are shown within a conceptual scheme, making relationships and linkages explicit.

Chapter three explains and justifies the methodology and research techniques used. Methods are outlined in detail, using existing literature to highlight both the benefits and potential weaknesses. Finally, the major ethical considerations and limitations to the study are highlighted to the reader.
Chapter four provides the context of the regulated Ghanaian cocoa sector. This also strengthens the justification for the methodological choices, particularly the comparative case study approach used to contrast both basic and advanced VCCs.

Chapters five and six present the findings and provide answers to the research question. Findings in chapter five show that there are large differences between the VCCs studied, in the amount of integration between cocoa producers and buyers and the benefits farmers receive from collaboration. Within each case, the effects on livelihood capitals, particularly human and social capital, are discussed, and it is found that both are enhanced by participation in an advanced VCC. The knock-on effects this has on farmers' autonomy is less clear, but is tackled in Chapter six. Autonomy can be constrained both explicitly and implicitly, and we find that where constraints exist in the cocoa market, advanced VCC generally offers opportunities to overcome these barriers.

The final chapter offers summarised answers to each of the research questions, and offers a theoretical reflection on the processes and approaches used in the research, including how the research relates to food sovereignty discourse. Suggestions for future research will offer a further insight into the limitations of both the thesis findings and current literature.
2. Theoretical framework

2.1 Introduction

The following section will outline the theoretical framework used for the thesis. First the sustainable livelihoods approach is outlined, where its application to the context of cocoa farmers in Ghana is explained, and critiques of the approach are highlighted. This is to be integrated with a value chain perspective, which again is explained, contextualised and its unique weaknesses are addressed. The combination of these two approaches allows the research to have a broad overview of market conditions whilst still remaining focussed on the household. Finally the food sovereignty movement is introduced, leading to the focus upon autonomy that led to the formulation of the main research question. The conceptual framework will then be presented, giving a graphical representation of the links that exist between key concepts and actors.

2.2 The sustainable livelihoods approach

“A livelihood comprises the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.” (DFID, 1999)

2.2.1 Origins, purpose and framework

The sustainable livelihoods approach (SLA) was first developed in response to calls for new practices within the development sector, following critiques of centralised top-down approaches (Jodha, 1988; Sen, 1981). Instead, the SLA sought to draw the three concepts of capability, equity and sustainability together for use within both research and policy (Chambers & Conway, 1992). The SLA takes into account various factors that can either aid or limit actors’ ability to achieve sustainable livelihoods (Scoones, 1998), looking beyond purely material views of poverty and developing an understanding of its complexities in reality (Scoones, 2009).

In Figure 1 we see the SLA framework. The vulnerability context allows us to evaluate the risks and shocks that can impact on individuals’ livelihoods. This is not, and should not aim to be, exhaustive (DFID, 1999). However it should identify the main contextual shocks and trends that can occur. The transforming structures and processes allow us to develop contextualised understanding under which individuals act. These have a direct impact on the vulnerability of an individual, and can also limit or enhance their
ability to follow different livelihood strategies. Although the livelihoods approach usually puts emphasis on the capitals available (the livelihood assets in the diagram), this study pays significant attention to the transforming structures and processes (see 2.2.2, 4.3 and 4.4).

Livelihood assets include physical, human, social, financial and natural capital (DFID, 1999). Each provides opportunities for actors to improve their livelihoods and grouping them in these categories allows researchers to focus on one aspect of the framework, whilst still ensuring the wider picture is kept in mind and inter-relations between assets are not ignored (DFID, 1999). As when identifying the vulnerability context, each of these capitals must be adapted to the local context; however they can be defined in general.

Using the DFID SLA guidelines (1999) we can outline each livelihood capital, before relating these to the Ghanaian cocoa farmer context. (1) Natural capital is the stock of natural resources from which livelihoods can be derived, clearly impacting individuals relying on agriculture. (2) Physical capital consists of both the infrastructure in an area and consumer goods that support livelihoods. (3) Financial capital is concerned with the ability to access credit or savings. These three capitals are conducive to objective measures, although limited access can have an impact even in their presence.

In contrast, human and social capitals have fewer absolute measures. (4) Human capital at the household level measures the quality and quantity of labour available,
affected by individuals’ knowledge and health. Objective measures include life expectancy, or average years of education; however these can lack context. Human capital can also be compared between groups, making analysis at the local level easier. (5) Social capital consists of any social resource that a person uses in their livelihood. This includes any formal or informal network, and is strongly linked with other livelihood assets, particularly human capital. In addition, the relationship between social capital and the presence of transforming structures and processes cannot be ignored. Where human and social capital are more subjective, they both require greater contextualisation to allow analysis of VCC on Ghanaian cocoa farmers’ livelihoods.

One of the key assumptions of the livelihoods approach is ‘that people pursue a range of livelihood outcomes (health, income, reduced vulnerability, etc.) by drawing on a range of assets to pursue a variety of activities’ (Haan & Zoomers, 2005). The decisions people take are due to their individual preferences, but are also subject to the systems they work within, captured within the transforming processes and structures of the SLA (Hobley & Shields, 2000). By exercising agency over these decisions through power to, power over, power with and power from within (Rowlands, 1997), individuals act to shape their livelihood trajectories whilst avoiding risk. Individual’s agency is realised through the transforming processes, which are enabled by the presence of facilitating structures (DFID, 1999). Many partnerships within value chains now recognise that access to productive assets is not enough; even with assets, farmers’ ability to improve their livelihoods can be impeded by institutional constraints that prevent them from taking market opportunities (De Janvry and Sadulet 2001). Livelihoods are reliant upon the presence of transforming structures and processes (Hobley & Shields, 2000) and will therefore be key components of the research, outlined in chapter four. The collaboration of farmers and buying companies within VCCs as a transforming process will be a focal point of analysis.

### 2.2.2 Application to Ghanaian cocoa farmers

The SLA is relevant at a range of levels, from the individual, and household, to the national level (Farrington et al. 1999). We use a household perspective, which recognises that individuals pool diverse resources together within a household to form their livelihoods (Lemke, 2005). This is relevant for Ghanaian cocoa farming households, where members benefit from income derived from diverse activities. Cocoa is often the largest
income generator, but can be supported by a range of activities that play different roles in providing security for the household and individuals' livelihoods.

In this research, farmers’ autonomy is the main focus. All the livelihood capitals will affect this autonomy and will be analysed. However for farmers to claim autonomy, they must have strong social networks and knowledge/capacity to exploit these networks. Therefore the effect of VCC on human and social capital will be looked at in the greatest detail, whilst also addressing financial, natural and physical capital. For cocoa farmers, human capital takes different forms including knowledge of farming practices, of market mechanisms and the health of farmers. Social capital also takes many forms, including the productive networks between farmers and buying companies, fellow cocoa farmers, family members and other chain actors.

Transforming structures include the organisations that impact cocoa farmers’ livelihoods (DFID, 1999). These include all chain actors, coming from the value chain perspective discussed later in this chapter. Buying companies will be treated as the main structure of analysis, directly linked to cocoa farmers; however Cocobod is also a dominant structure. In turn, these structures rely upon the processes that they function within. Specifically looking at VCC as the process of analysis, farmers’ power relates to their ability to impact their position within cocoa markets, taking into account individual attitudes. Transforming processes also include the culture of the farmers, their attitude to risk, innovation and acceptance of hierarchies, as well as policy and legislation that affects the value chain and further external institutions (DFID, 1999). Taking these into account ensures that findings are appropriately contextualised.

2.2.3 Critiques of the sustainable livelihoods approach

The livelihoods approach recognises that actors face decisions and challenges whilst following a ‘pathway’ of livelihood activities (Haan & Zoomers, 2005). Using the SLA allows the research to be both contextual and focussed on small-scale farmers’ agency. However criticisms exist, with Scoones (2009) arguing that the claim to be able to link different scales is an ambition rather than reality. Often the SLA is ignorant of the impacts of global scale issues, particularly relevant as we seek to analyse a global value chain. This creates the need for an adjusted approach. By combining the SLA with a value chain perspective to construct our framework, the global scale is incorporated into the analysis, to be discussed in the next section.

Another critique, made by de Haan & Zoomers (2005) highlights the lack of emphasis on power relations, especially within informal relations. However, developments
within gender studies have formed the ‘room for manoeuvre’ concept that highlights individuals’ ability to recreate power relations at each new interaction (de Haan & Zoomers, 2005). De Haan advocates an analysis focussed on how the poor are able to improve their livelihood trajectories through this type of negotiation. With the inclusion of the value chain perspective, our framework will identify power relations to explore how VCC has affected smallholder farmers’ ability to negotiate within private partnerships. Following Rowlands (1995) we thereby operationalise power as power over (production, marketing, benefits), power to (negotiate benefits and risks), power with (other farmers to undertake social action), and power from within (believe in one’s capacity to effect change, improve livelihoods). This operationalisation of power will be referred to throughout from primarily within the operationalisation of autonomy (see appendix 1), and gives us a tool to address power issues within the SLA.

2.3 Value chain perspective

“The value chain describes the full range of activities which are required to bring a product or service from conception, through the intermediary phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use.” (Kaplinsky, 2000: 121)

2.3.1 Origins, purpose and framework

The framework of the value chain perspective views chains as dynamic, open systems that give space to producers to ‘upgrade’ their product and process of function (Laven, 2010). First introduced by Hopkins & Wallerstein (1986) with contributions made by Gereffi & Korzeniewicz (1994), its aim was to identify ways in which balances within commodity chains can be changed. These commodity chains consist of ‘the whole range of activities involved in the design, production, and marketing of a product’ (Gereffi, 1999: 38) and show the opportunities and constraints actors face within global chains (Gibbon, 2001). The later move to value chains represented the recognition that additional value is added at each link in the chain (Smakman, 2003).

The value chain perspective allows the exploration of power relations and autonomy, where individuals’ (in)ability to access networks can limit participation (M4P, 2008). Significant emphasis is put on power relations, and it is recognised that these affect informal institutions, particularly in agricultural settings (M4P, 2008) and show us which actors exercise power over benefit/risk distribution (Gereffi, 2014). Within buyer-driven chains, of which cocoa is one (Fold, 2002), most power is held by those at the end of the
chain (Gereffi, 2014). However the dichotomy of producer- vs. buyer-driven value chains does not allow for some of the complexities of agent strategies to be explored (Fold, 2002).

Further developments led to a shift of perspective from the governance of the overall chain, to coordination within specific levels, in this thesis the link between a cocoa farmer and local buyer. Subsequently, smallholders’ integration into markets can be split into both vertical and horizontal integration (Bolwig et al., 2010). Vertical integration describes the flow of goods and services, from producer to consumer, concerned with the value added by actors and the resulting income share (Kaplinsky, 2000; Ponte, 2008). ‘Flows’ can include the transfer of material resources, knowledge, finance and information (Bolwig et al., 2010), offering strong links to the SLA, seen as the development of livelihood assets within the transforming process of the value chain. In contrast, horizontal integration describes the level of control over chain management at a specific level, and in the case of small-scale farmers, how this affects livelihoods and the local community (Bolwig et al., 2010). Horizontal analysis goes beyond chain actors directly involved with production or commercialisation, enabling a more holistic view to be gained within a specific value chain link (Verschoor et al., 2011). For Ghanaian smallholders within this research, vertical integration will offer limited insight. Large economies of scale exist when grinding cocoa, and it is unfeasible for small-scale farmers to add further value. Conversely, an analysis of the level of horizontal integration, within specific levels of the chain, will give insight into the context and power relations that smallholders work within.

2.3.2 Application to the Ghanaian Cocoa market and integration with the SLA

The value chain perspective is a flexible analytical framework that can be used at any level within the value chain, including when researching a household’s position within cocoa value chains (M4P, 2008). This perspective can be top-down, when governance structures are the focus, or bottom-up, where the strategies of actors seeking to improve their economic position are the focus (Gereffi and Fernandez-Stark, 2011). This research takes the ‘bottom-up’ perspective, allowing us to incorporate the SLA. Rather than give accurate analysis of income distribution within the chain (M4P, 2008), we show how actors on different scales are linked to the global economy, hence use the value chain perspective as a descriptive tool that takes account of both the micro and macro level interactions (M4P, 2008). Integrating this with the SLA, in the form of both human capital (knowledge of market functionality and actors) and social capital (networks), is where we will gain the most value from our framework.
For the application to our interest in VCC and the effects on smallholder livelihoods we must recognise that whilst relationships with multi-national corporations (MNCs) can be exploitative, there are also conditions where terms can directly encourage development of producers (Gibbons, 2001). Traders’ profits from cocoa depend on high volumes of varying quality cocoa from many small-scale farms, traditionally meaning a lack of investment into primary suppliers (Gibbons, 2001). However, this is changing. Laven (2010) highlights that it is in buyers’ strategic interests to ensure both smallholders’ wellbeing and profitability, with investments in producers vital to long-term sustainability; with Porter and Kramer (2011) claiming the ability to integrate business profit seeking with societal progress is vital to how companies run. VCCs build cooperation and trust between actors, increasing innovation, productivity and profits for all chain actors (MaLi, 2006). Terms within VCCs undoubtedly impact households’ ability to improve livelihoods, and the value chain perspective enables us to analyse these external factors within chain linkages, an area often neglected when using the SLA alone (Barrientos et al., 2008). The value chain perspective compensates for both the household focus and lack of attention towards power relations that characterise the SLA by (1) analysing the impact that multiple actors have on smallholders’ livelihoods and (2) specifically targeting the power relations within VCC between smallholders and private firms.

2.3.3 Critiques of the value chain perspective

An identified weakness of the value chain perspective is the strong focus on either the lead firm, or the formal (rather than informal) institutions (Laven, 2010). The focus on lead firms as key decision-makers is important, however to fully understand the impact of VCC on local development we must include suppliers, and hence producers should be a focus (Laven, 2010). As already stated, both the SLA and value chain perspective are applicable to smallholders. The focus on formal institutions will be remedied through the use of the smallholder perspective and qualitative data, which, in chapter 5, will uncover both formal (with clear rules, laws and organisations) and informal institutions (social values/norms, group routines) (Amin, 1999).

The synergy between the SLA and the value chain perspective grants less risk of bias affecting the findings of the research. Kanji et al. (2005: pp.13) argue, with respect to this synergy, that ‘Much is complementary and combining the two approaches provides a more comprehensive understanding of both the structure of markets and the way in which markets for particular goods interact with livelihood strategies’. Developing VCCs is vital for
smallholders’ ability to partake in horizontal integration, and the ability to achieve improved livelihoods (MaLi, 2006). Both qualitative and quantitative methods can be used to understand the local specific context, and an understanding of global supply and demand within markets is needed (Kanji et al., 2005). Combining both the SLA and value chain perspective highlights the core processes and relations that affect livelihoods and how these can be enhanced (Barrientos et al., 2008).

2.4 Food sovereignty

“Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems.” (Campesina, 2007:1)

2.4.1 Origins, purpose and framework

Food sovereignty discourse has continually developed in the last 20 years, and is now used within legal norms and state constitutions (Edelman, 2014). Whilst definitions of food sovereignty have varied, following the development of the discourse (Edelman, 2014), we use a typical definition as the “right of people to produce, distribute and consume healthy food in and near their territory in an ecologically sustainable manner” (Altieri & Toledo, 2011: 588). Resilience against international markets has been a core principle of the food sovereignty movement (FSM) (Edelman, 2014) and it is argued that current global changes are limiting the ability of developing countries to achieve food sovereignty (Altieri, 2009).

A nation’s food sovereignty can be threatened by deregulation and speculation within international commodity markets (Altieri & Toledo, 2011), which are charged with raising food prices and being a direct cause of the 2007/2008-food crisis (Kaufman, 2010). Further threats come from the associated move from peasant agriculture to capitalist methods (Altieri, 2009). Developing countries have amplified these effects by subsidising the cultivation of agro-exports and biofuels (Altiedi & Toledo, 2011). This integration has exposed farmers to world price fluctuations, cultures of mono cropping, decreased sustainability of farming practices, and reliance upon value chain actors, increasing risk to small-scale farmers’ livelihoods (McMichael, & Schneider, 2011).

The FSM rejects the globalisation of world markets spreading capitalist farming methods (Burnett & Murphy, 2014), and calls for traditional agriculture based on local knowledge (Edelman, 2014). These techniques produce diverse crops, with year-round yields and no need for external fertilisers. They rely on local knowledge and crop varieties, creating resilience for small-scale farmers to price shocks, drought, environmental
changes and other potentially catastrophic losses (Altieri, 2009). Further, it is argued that small-scale farmers are better positioned to meet food consumption demands of national populations, producing more calories per hectare with a greater range of crops and nutritional value than large-scale capitalist farms (Altieri, 2009; Van der Ploeg, 2014).

For this thesis, we make clear the distinction between food security and food sovereignty. Despite overlap in historical definitions, we use recent trends to separate the two (Edelman, 2014), where the concept of food security concerns only the ability to access and consume adequate nutrition for a healthy life (FAO, 2013). Food sovereignty, as discussed, includes consumption, but also includes the individual rights over production (Patel, 2006), including aspects of power that depend on livelihood assets, transforming structures and processes, and how these are impacted by VCC between cocoa farmers and buying companies.

### 2.4.2 Autonomy as a function of food sovereignty

Current developments of food sovereignty discourse have identified three core aspects: (1) access to food; (2) autonomy over the production of this food; (3) the sustainability of production (Altieri, 2009; Ros-Tonen et al., in press). The focus of this research is smallholders’ autonomy, allowing us to evaluate specific effects of VCC within the value chain perspective. This also allows integration with the SLA, where the level of autonomy translates into ability, or the lack thereof, of smallholders to affect change within their livelihoods. Through both direct effects of VCC, and indirect effects from changes in livelihood capitals, we will be able to evaluate the autonomy of farmers.

For the analysis of cocoa farmers’ autonomy, we make a distinction between the ways this can be realised. First, autonomy is the ability to act freely in relation to the level of *explicit constraints*. This is mainly through rules and regulations, and in the agricultural context can come from government rulings and private agreements. The second is in relation to the *implicit* constraints, which are not directly enforced, but still result from external forces. Implicit constraints can come from underdeveloped alternative strategies, such as the lack of markets to enable farmers to diversify; limited knowledge of livelihood choices, for example the absence of knowledge on a new fertiliser or the inability to apply it effectively; and from cultural pressures, which can limit individuals through social pressures and norms. In both cases, the removal of constraints represents an opportunity for farmers to claim autonomy. This separation will give two distinct areas of analysis for autonomy of cocoa farmers.
Food sovereignty also calls for continual development of local markets, for both farming inputs and agricultural produce (Altieri, 2009; Altieri & Toledo, 2011). This can include greater integration with national markets, connecting rural producers to urban consumers (Altieri, 2009), and does not have to be set against all world-trade (Burnett & Murphy, 2014). Importantly for the application to growers of cocoa, there is also currently growing recognition of farmers’ inclusion into various value chains (Alonso-Fradejas et al., 2015), where innovations include ‘value-webs’ (Virchow et al., 2014), where the varieties of value chains that farmers can be intertwined signify the need for adaptability of the FSM to different contexts.

2.4.3 Application to cocoa farmers in a global commodity chain

The FSM has many ideals that do not fit cocoa farmers in Ghana. There is a large reliance upon cocoa as a cash crop to provide income to communities and for many, cocoa is by far the dominant crop (Barrientos et al., 2008). However cash crops cannot be ignored by food sovereignty discourse (Burnett & Murphy, 2014). Cocoa is a major crop for Ghanaian farmers, but intercropping is common and farmers engage with local markets (Laven 2010). The FSM is not incompatible as a way of viewing the current VCCs and gives a specific dimension from which critics can be drawn on both the way the chain operates, and the FSM itself.

Autonomy, the focus for analysis, is a key determinant for small-scale cocoa farmers’ relationship within VCCs and their livelihoods in general. From each actors perspective there are reasons for wanting to limit farmers’ autonomy, for the benefit of decreasing risk, increasing profits or increasing control over. However there are also benefits to increasing autonomy. For example, providing farmers with human capital in the form of farming knowledge will give them increased choices, and therefore autonomy, over the production of their crops, but should also lead to greater increases in productivity, beneficial for all actors.

2.4.4 Critiques of the food sovereignty

A key weakness in food sovereignty discussions is the lack of scale. As literature develops, the scale at which food sovereignty should be targeted becomes less clear, with definitions shifting focus from ‘the nation’ to ‘the people’ (Edelman, 2014). The question of who should be sovereign has large implications for the perspective that should be taken, and policy recommendations. If concerned with national sovereignty, we may find individual farmers’ autonomy decreases, especially if their wishes contradict the needs of the state. However if concerned with individuals’ sovereignty there is no guarantee of
societal needs being met, especially as urban populations increase. For integration with our theoretical framework, our analysis will be on the autonomy shown by households, predominantly discussed in chapter 6.

Perhaps the largest weakness, particularly in relation to this research, is the lack of clarity on the FSM's perceptions on trade. There is a clear preference within the FSM, on “on local autonomy, local markets, local production-consumption cycles, energy and technological sovereignty, and farmer-to-farmer networks.” (Altieri, 2009: 104). However the use of the term local is ambiguous (Alonso-Fradejasa et al., 2015), not necessarily meaning it is against international trade (Burnett & Murphy, 2014). It is also not clear where food sovereignty discourse would place export crops, currently vital for many small-scale farmers livelihoods (Burnett & Murphy, 2014). Cash crops such as cocoa, which offer little opportunity for adding value, do not seem to have a place in a discourse that strongly focuses on the ‘local’. However, with five million small-scale farmers responsible for growing 90% of the world’s cocoa (Fairtrade Foundation, 2014), the contribution this crop makes to individuals livelihoods cannot be ignored (Burnett & Murphy, 2014).

There has been a gradual acceptance, with focus broadening from a strictly local viewpoint to a view that accepts market participation, and places importance upon the terms of this participation. Many small-scale farmers see the production of export crops as a status symbol (Sing, 2002); others want to better integrate themselves into the most promising markets under fairer terms of trade (Murphy, 2010); and many have limited market options when seeking to gain income (Burnett & Murphy, 2014). Specific research into these challenges offers the opportunity to contribute to the future direction of the FSM (Alonso-Fradejasa et al., 2015) and explore new ways for diverse actors to realise food sovereignty (Burnett & Murphy, 2014).

Whilst merging both the SLA and the value chain perspective allows us to accurately assess a smallholder’s livelihood within a global value chain, including food sovereignty allows the research to focus on autonomy as a defined aspect of farmers livelihoods, giving rise to specific areas for future research and theoretical contributions.
2.5 Conceptual framework

The conceptual scheme below shows how concepts from the theoretical framework are interlinked. This is broken down into four main sections. Core concepts include value chain collaboration, livelihood assets and autonomy, and food sovereignty as a secondary concept to which theoretical links can be made. Key actors include small-scale cocoa farmers, buying companies (PBC and Armajaro) and Cocobod.
The first part displays the interaction of farmers and buying companies that lead to VCC (of varying degrees), with Cocobod also having influence over both actors. The VCC is the main transforming structure in place, but for accurate contextualisation the conceptual scheme includes other transforming structures and processes outside the scope of research. The exploration of the motivations of actors, power relations, and institutional arrangements that exist within VCCs will be the subject of sub-question one.

The second part of the diagram shows how VCC impacts the livelihood assets of farmers. As discussed, the focus here will be on human and social capital, however all capitals will be considered within the analysis. It is here that sub-question two will be answered.

The third part shows how the concept of farmer autonomy can be affected through conditions within the VCC, and through enhancements of livelihood assets that enable farmers to claim autonomy. This will be the subject of sub-question three and will make it possible to answer the main research question.

The fourth part of the conceptual scheme lies outside of the main focus of research, but offers the opportunity to make a theoretical contribution to food sovereignty discourse. As highlighted in the development of the theoretical framework, there are large questions still being asked surrounding the role of international trade within the FSM. Using a comparative case study will mean this research will be able to provide a valuable illustration ‘on the ground’, and answering sub-question 4 will aim to provide a reflection on this theory whilst offering clear avenues for further research. The final link back to VCC is elaborated upon in Chapter 7, where the findings of the research are used to give practical implications for the development of VCCs in the future, and to influence the was food sovereignty treats VCC in global value chains.

2.6 Conclusion

Our theoretical framework has argued that the SLA combined with a value chain perspective is needed to understand the types of VCCs in which smallholder cocoa farmers are engaging. We have identified both VCC and the development of livelihood assets as key to autonomy of farmers as an aspect of food sovereignty. The limitations of each aspect of the theoretical framework have been identified and the most concerning are made explicit. Combining different theories aims to alleviate some weaknesses, and other concerns are reflected upon in the concluding chapter.
3. Methodology

Chapter three outlines and justifies the methodology used to guide this research. First, a brief operationalisation of main concepts is given. The methods will then be outlined, including the research location, the main units of observation and the data collection and analysis methods. Justification is given at each stage, before, the limitations and ethical aspects of this study are addressed.

3.1 Operationalisation of major concepts

The major concepts developed from both the theoretical framework and conceptual scheme have been operationalised to show their application to the research and conclusions in this thesis. The operationalisation table (see Appendix 1) shows the full operationalisation used during data collection, with each concept split into dimensions, variables, and indicators used to measure them in the Ghanaian cocoa farmer context.

The operationalisation of transforming structures and processes provides context and understanding of the climate that chain actors work within (DFID, 1999). These include public, private and civic structures and policy, legislation, institutions and culture as transforming processes. Livelihood capitals have been operationalised to include indicators in line with the DFID SLA guidelines (1999). Human capital includes farmers’ knowledge of farming practices and health. Social capital is measured through the formal and informal relationships that exist, and how these are able to facilitate farmers’ livelihoods. Taken together, changes will show how farmers’ ability to create change is affected, and how they shape farmers’ responses towards innovation, risk and hierarchical relationships.

Reflecting its importance within this thesis, VCC is independently included, broken down to the actors present, their interests and internal activities. A detailed analysis is vital before conclusions about their effect on livelihoods can be credible. Within VCC, variables focus on actors and their interests, formal and informal agreements that guide the relationship, and activities related to input and service provision. This will give insight into the conditions under which farmers work, and their ability to influence these.

Within the autonomy concept we recognize the inherent link with power relations, particularly power over (production, marketing, profit and risk), power to (negotiate profits/risks), and power from within (i.e. the power to effect change) (Rowlands, 1997). After being broken down into autonomy of production, marketing, benefits/risks and, creating change, variables focus on farmers’ alternatives to cocoa, the reasons that
underlie their choices to grow cocoa, as well as their share of benefits and risks and influence on these. The fourth component of power as conceptualised by Rowlands (1997), power with, has been operationalised under social capital as farmers’ networks, communication and ability to negotiate with buying companies.

3.2 Methods

This thesis uses a comparative case study design, across two different buying companies, with both quantitative and qualitative data collected. This section will outline and justify the focus of analysis, data collection methods used and how data has been analysed.

3.2.1 Research design

Following a mixed methods approach is encouraged within the SLA (Scoones, 1998), using the strengths within each approach to triangulation findings (Pool et al., 2010). A direct split, however, between qualitative and quantitative methods, is not practical; research often embodies one approach to a greater extent (Morgan, 2007). This research focuses mainly on qualitative data, to encourage a holistic portrayal of cocoa farmers’ livelihoods from their own perspective. Quantitative data is used in an embedded design (Cresswell & Clark, 2007) to explore the broader context that individual cases relate to.

A case study is relevant for studying phenomena within its own context, and where there may not be clear boundaries between the phenomena and the context (Yin, 2009). This study focuses on in-depth study of two cases, with a range of aspects being analysed. A comparative case study allows us to focus on the differences between key variables, where many other variables also exist (Yin, 2009). Later the case studies also enable theoretical reflections to be drawn (Bryman, 2008), despite a non-representative population sample (Yin, 2009).

This study is part of a broader WOTRO Science for Global Development research programme, in which Masters students, PhD researchers and staff of both the University of Energy and Natural Resources (UENR) and the University of Amsterdam (UvA) take part. Local supervision, translation, contextual knowledge and assistance in contacting key gatekeepers within the cocoa industry were all provided when needed, ensuring a high degree of integration in a short time frame.
3.2.2 Units of analysis and the selection of study locations

In comparative case studies, the units of analysis are the cases of comparison (Yin, 2009). In this research, the two cases are examples of VCC between cocoa farmers and buying companies. The buying companies selected are: the Produce Buying Company (PBC), which offers basic VCC; and Armajaro, which offers UTZ\(^2\) certification to farmers as a form of advanced VCC. This comparison of basic VCC with advanced VCC enables the impacts this difference has on farmers' livelihoods to be explored in depth.

3.2.3 Research location

Research was carried out in the Eastern region of Ghana, where cocoa was first introduced in the country in the 19\(^{th}\) century (Kolavalli & Vigneri, 2011). Typically, farm sizes in the Eastern region are small, with 93% of agricultural land holdings below two hectares (MOFA, 2015). The majority of the population make their living from farming on land that is naturally semi-deciduous rainforest (MOFA, 2015). Figure 3.1 shows both the location of the Eastern region in Ghana and the four villages where the research took place.

Table 3.1 – Table of respondents and their locations

<table>
<thead>
<tr>
<th>Village</th>
<th>Interview Participants (n = 30)</th>
<th>Focus Group Participants (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PBC respondents (n = 15)</td>
<td>Armajaro respondents (n = 15)</td>
</tr>
<tr>
<td>Ofoase</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Chia</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Ayirebi</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>Akikwaso</td>
<td>4</td>
<td>-</td>
</tr>
</tbody>
</table>

Whilst searching for farmers who sold to PBC or Armajaro, four villages were selected in conjunction with key gatekeepers. Unfortunately the PBC officer in Ayirebi was not able to participate, and so Akikwaso was included, however both PBC and Armajaro were present in all communities, along with other buying companies not included in the study.

\(^2\) Originally from the phrase Utz kapeh, meaning “Good coffee” in the Mayan language Quiché
3.2.4 Units of observation

The units of observation are the actors involved in VCC. In keeping with the SLA, the main units of observation are small-scale farmer households. This recognizes that
households often pool diverse resources (Lemke, 2005) and enables the inclusion of all activities contributing to households’ livelihoods. A gender-sensitive perspective is taken to the analysis, by paying attention to differences in VCC engagement between male and female cocoa farmers. However, the division of labour and decision-making power within the household is beyond the scope of this research.

Buying companies, whilst interacting with Cocobod, form the main point of contact for smallholders in the cocoa value chain, justifying their inclusion as a second unit of observation. They influence smallholders’ livelihoods and level of autonomy, and act as the main transforming structure, linking farmers to other chain actors. At a local level, it is the purchasing clerks who interact directly with farmers on behalf of buying companies and are included in key stakeholder interviews. Other units of observation include the Ghanaian cocoa board, Cocobod, who have successfully been able to offer a degree of protection to cocoa producers (Kaplinsky, 2004). It has a variety of roles, seeking to realise develop the cocoa sector as a vehicle of poverty reduction and economic growth (Cocobod, 2015). Cocobod is a major stakeholder in Ghana's cocoa markets, and is directly responsible for setting the conditions under which smallholders and buying companies work. Finally UTZ certification is a major unit of observation. It provides the conditions for certification of farmers within Armajaro's advanced VCC. By setting the conditions for certification and being in charge of auditing these conditions, UTZ can have a large effect on farmers livelihoods and the relationship between Armajaro and cocoa farmers.

3.2.5 Sampling

Due to the use of comparative case studies between farmers of specific attributes, farmers could not easily be identified, leading to a need for purposive sampling (O’Leary, 2004, Bryman, 2012). Purposive sampling was used to first select four villages with both PBC and Armajaro present (See Appendix 2). The selection of PBC and Armajaro was aimed at giving a diverse case selection (Gerring, 2006) to explore the contrast between basic and advanced VCCs respectively (Creswell, 2009).

Local purchasing clerks were sought out as key gatekeepers, being the direct link between farmers and buying companies. Snowballing was then employed to gain access to farmers through purchasing clerks, focusing on those selling to the buying companies studied. This involved purchasing clerks contacting a number of farmers from their network (Bryman, 2012), and selection was made under the constraints of convenience for, and availability of, farmers.
3.2.6 Data collection methods

Qualitative observations were made throughout the fieldwork, and provided both general context, and specific insights into the processes and power relations that exist within VCC. These add first-hand accounts of content discussed during interviews and focus groups, and allowed the research to “record the mundane and unremarkable (to participants) features of everyday life that interviewees might not feel were worth commenting on and the context within which they occur” (Green & Thorogood, 2004: 132).

Main activities observed included, the maintenance of a cocoa farm, the selling of cocoa beans, communication between buying companies and farmers and self-provision of food.

In addition, the regular observations of my primary research assistant have been vital. Being a native, fluent in the local language Twi, he was often able to give greater insight into observations I made. Further, he made use of informal conversation with farmers to attempt to add to data collected during interviews. During the research period, relationships with farmers were built, and through informal conversations the research benefitted from both triangulation of findings, and additional information being given.

A baseline survey among cocoa farmers was completed within the overall WOTRO project, with 148 respondents. Through this survey, both qualitative and quantitative data was gathered on tree crop farmers’ characteristics, assets, market orientation, and food security. The database resulting from this baseline survey has been mainly used to provide contextualisation of the population. An additional survey was also administered to the 30 interviewees, proceeding to gain further quantitative data on the farmers’ perceptions of their autonomy and relationships with the LBCs. These post-interview Likert scales allowed the research to add a quantitative dimension to the qualitative interviews (Allen & Seaman, 2007). Respondents gave the perceived impact of VCC upon aspects of their livelihood assets and autonomy.

<table>
<thead>
<tr>
<th>Statement: How has the LBC that the HH sells most of its produce to...</th>
<th>5 Very positively</th>
<th>4 Positively</th>
<th>3 No change</th>
<th>2 Negatively</th>
<th>1 Very negatively</th>
</tr>
</thead>
<tbody>
<tr>
<td>... supported local farmer organisations</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Figure 3.3: Example Likert scale used in an interview
Semi-structured interviews with 30 farmers (20 males, 10 females, see Appendix 3) covered specific topics whilst still allowing interviewees to shape the course of the interview (Bryman, 2008). The format allowed farmer perspectives to emerge within a flexible conversation, whilst ensuring a focus on the concepts highlighted in the theoretical framework. Interview guides were used to ensure both comparability between the two cases chosen and focus on key concepts (Bryman, 2008). Whilst these were adapted to reflect evolving points of interest, different versions of the interview guide were used equally between basic and advanced VCC. Interviews were successful in keeping to key concepts and regularly revealed new perspectives, reflecting both the flexibility and focus offered through the use of semi-structured interviews. This flexibility was also vital in the sense that, despite having fairly strict criteria, there was still great heterogeneity seen in farmers, meaning questions could be tailored to individual personal situations.

Interviews were also held with various key stakeholders (see Appendix 3) to give a range of perspectives on the functioning of the value chain. These were less structured than farmer interviews, meaning that interviews covered more material, whilst areas of interest could be explored in depth. In practice this meant respondents were encouraged to give a holistic view of their role, gaining information on respondents’ areas of expertise, to ensure that rich and reliable data was collected rather than unqualified opinions, although these were undoubtedly still given. Therefore the research gained both general context on, and specific insights into, value chain relationships.

Finally, focus groups in three communities were held with interviewees, giving the opportunity to triangulate the research findings with communal discussion. The focus groups were used to feedback findings for confirmation and to gain further insights. The groups enabled participants to work together and discuss different aspects of cocoa farming, to challenge each other’s points of view and to bring up their own topics for discussion with the group (Bryman, 2008). Findings were often explicitly confirmed before discussions were encouraged through ranking/level of importance exercises related to previous interview questions. Vignettes, which use fictional individuals and situations to provoke comments from respondents, were also employed (Hughes, 1998). These put farmers in hypothetical situations, encouraging comment and debate on individuals’ judgements, and the merits of different approaches or responses (Barter & Reynold, 1999).
3.2.7 Data analysis

Qualitative analysis for this research is in keeping with Creswell’s (2009: 184) assertion that “qualitative data analysis is conducted concurrently with gathering data”. Data collection began instantly, in the form of observations and conversations with key stakeholders, and this was inevitably analysed in comparison to the theories and framework set out in chapter two. The research also involved continual reflection on interpretations of data, leading to constant evolution of findings and a ‘general sense’ of data; this provided an important first step in analysis, and should not be ignored during formal data analysis (Creswell, 2009).

Once collected, qualitative analysis was conducted through Atlas-ti, allowing codes to be generated, applied and evaluated for common trends. Rather than waiting to form codes emerging from the data, this research used theoretical sensitivity that uses predetermined codes for analysis to allow analysis to focus on the theoretical framework and operationalisation developed for the research (see Appendix 1) (Boeije, 2008; Creswell, 2009), however additional codes were also added where needed. Quantitative analysis has been made through SPSS, with basic descriptive statistics used to describe the current context that cocoa farmers work within and findings from the research on livelihoods and autonomy.

3.3 Ethics and limitations

Ethical considerations have been taken into account at every stage of the research, from pre-planned ‘procedural’ ethics, to more reflexive day-to-day ethics in practice (Guillemin & Gillam, 2004). Key focal points have been taken from Bryman (2012) as: informed consent; non-invasion of privacy; and avoiding deception and harm to participants. Simple measures, consistently followed satisfied each of these ethical considerations. Informed consent was achieved by explanation of what the research focused on and individuals’ ability to withdraw consent, completed before collecting any formal data. Particularly we made it explicitly clear that the nature of the study was research, rather than input provision from the government as many assumed. After a full debrief, participants were informed about their participation, the reasons for the research and the implications this may have for their privacy.

Further steps taken to address the privacy of respondents include the sampling technique, where participants were contacted through the local buyer, an actor they were already familiar with. This increased their ability to ask questions with someone they were comfortable with before agreeing to participate. Finally, to prevent harm to participants
anonymity was ensured, meaning opinions given during data collection were confidential and could not be used against participants.

Limitations are present in any study, and here some of the key limitations have been identified and discussed. The first limitation, inherent to any researcher working in a new location, is a lack of contextual understanding (Creswell, 2009), meaning information may be biased through researcher misconceptions or misunderstandings. The effect that a researcher has on the researched populations cannot be ignored either. For example, it was clear participants reacted to me as a foreigner, and often assumed I could grant them extra provisions from the government. This was accentuated through barriers to direct communication, with the local language being Twi and requiring a translator in most cases. This undoubtedly meant that some nuances to the data were lost in translation, and informal conversations were not all captured. However the research benefitted from a highly educated translator from the UENR, who was included in planning stages for both logistical and theoretical discussions, ensuring that the purpose of the research was clear, and was the only translator used for all qualitative data, giving consistency to the research.

Another inherent limitation to any researcher is subjectivity. Researchers should always aim to be objective, but this is not reality (Bryman, 21012). Researchers unconsciously carry their own biases, but this limitation also comes from the subjects of research. There will be an array of different opinions grouped into the ‘farmer perspective’, meaning there will necessarily be some debate over its validity. The same limitation can be seen in all actors within the research, and motivations and mandates must be accounted (Bryman, 2012). This manifested itself in different ways. Farmers would often complain and give lists of inputs that they should be provided, with the hope that their answers would be relayed to either the government or LBCs, despite it being made clear I was in Ghana on behalf of the University of Amsterdam (UvA). The subjectivity of the translator must also be included, mainly present through the kinds of information that would or would not be deemed important to include. This was highlighted during data collection as some longer answers were translated into very short ones. However once the expectations had been clarified, I was confident that as much detail as possible was consistently being provided.

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3 One group claimed they got nothing from their buyers, until the buyer revealed they had provided a free knapsack sprayer for free. Farmers agreed this had been given, but discounted it because it had broken after 6 months use.
Sample bias is a risk acknowledged within both purposive/snowballing techniques. A diverse case selection is likely to be representative in a minimal sense, highlighting the variation in a population, but not focussed on the distribution (Gerring, 2006), making a key reflection point the ability to transfer findings from the research to other contexts. This is also highlighted in the limited number of respondents, and the limited geographical area targeted. Therefore, the results cannot be representative of the population in Ghana, or even of the Eastern region. Rather, they are aimed at being illustrative of the potential advantages/disadvantages of VCC, and it is these differences that can be applied to other contexts. By focussing the sample population, the research gained a high amount of focus to be able to apply findings to the theoretical framework, but also lost representativeness of the general population.

In the three focus groups, a buyer from either Armajaro or PBC was present, which limited the freedom of participants to express themselves freely. However, whilst this has been highlighted as a potential weakness, in reality I did not see any evidence of bias occurring. Farmers were confident in highlighting issues in the buyers’ presence, and there were no instances of buyers trying to censor participant responses. It was also the case that in a minority of interviews, the buyer was present for parts of the interview. However again there seemed to be no hesitation from farmers in telling their true feeling, and in some cases directly challenged buyers when present.

A final, very specific limitation, presented itself during the analysis of the data collected for the baseline survey. Some cases of self-reporting from farmers led to surprising results, especially to do with land holdings and cocoa yields. During the survey it had not been possible to independently verify farmers reported land holdings, and the reliability of these results can be questioned. However there is still valuable information in farmers own reports, but we should be critical about their exact accuracy.

3.4 Conclusion

This chapter has presented the methods used for data collection and analysis. This ensures that the rationale behind methods chosen is fully understood and transparent, before the subsequent data is presented. The methods will allow data to be collected in light of the theoretical framework of Chapter two. Qualitative interviews give a farmer perspective, verified through triangulation from focus groups. The value chain perspective comes from the use of secondary data, presented in Chapter four, and through key stakeholder interviews, detailing processes that occur in the chain.
4. Research context

With a view to providing background to the research, this chapter first gives a brief historical context to the Ghanaian cocoa sector, outlining the key developments in the sector relevant to this study. In line with our theoretical framework, existing transforming structures are then discussed. Here main actors and their roles within the value chain are outlined. Key are both the roles of Cocobod in the governance of the national market, and the role of buying companies as the link between farmers and the world market. Under transforming processes, both the certified and uncertified cocoa chain are introduced. Here key comparisons on livelihood effects will be introduced as a basis for the analyses in chapters five and six. Other processes include alternatives to the cocoa market, and the effects of Ghanaian culture. Finally a general ‘farmer profile’ is given, providing context on the current livelihoods and activities of the farmers within the research.

The chapter uses existing literature and contextual data gathered whilst in the field, thus combining the wealth of existing research on Ghana with ground-truthing based on observation and active participation.

4.1 The history of the cocoa value chain in Ghana

In contrast to other cocoa-producing countries, Ghana has rejected market liberalisation and maintained governmental control over the cocoa value chain through Cocobod to protect the industry (Barrientos et al., 2008; Laven, 2010; Mohammed et al., 2012). Traditionally, cocoa markets have two actors leading the value chain: (1) international processors/grinders with influence over both producer and consumer countries; (2) large chocolate producers, who determine their demand for cocoa from the rest of the value chain (Kaplinsky, 2004). This results in power imbalances, as small-scale farmers producing approximately 86% of world cocoa (Mohammed et al., 2012), find themselves unable to influence the market (Kaplinsky, 2004).

Prior to partial liberalisation in 1992, the Ghanaian government had monopoly power over the national cocoa value chain characterised by a single buyer of cocoa, the PBC; fixed prices; and strict national minimum standards (Kolavalli et al., 2012). Looking to promote efficiency, the Ghanaian government established Cocobod with the ability to administer licenses, allowing private companies other than PBC to buy cocoa on behalf of Cocobod (Kolavalli et al., 2012). The buying companies buy cocoa from farmers at a given minimum producer price and deliver this to Cocobod at a set compensation rate, giving a ‘buyers margin’ (Kolavalli et al., 2012). This margin allows buying companies to cover
their costs, and any excess to be taken as profit, which is, as a consequence, heavily reliant on the quantity of cocoa sourced (Mohammed et al., 2012).

With competition between buyers for large quantities of cocoa, incentives exist for buying companies to invest in farmers, in order to gain farmers’ cocoa and future loyalty (Adu-Acheampong, 2013; Vigneri & Santon, 2008). However, expected price differentiation did not occur, with LBCs blaming small margins (Kolavilli et al., 2012). In its absence, buying companies used VCCs to ensure cocoa supply by building trust, investing in the local community, or providing services for farmers (Laven, 2010). For the 2012-13 season, there were 29 active buying companies, with PBC, Akufo Adamfo and Armajaro being the three largest, with market shares of 35%, 13% and 11% respectively (Cocobod, 2013). The majority of buying companies have Ghanaian owners, with only Armajaro and Olam having international parent companies in Britain and Singapore respectively (Vigneri & Santon, 2008). Despite initial plans, all external marketing is through Cocobod, with no buying companies, including those with international owners (Armajaro & Olam), being given permission to export. In addition, the processing capabilities of Ghana have remained limited; 78% of raw cocoa beans were exported without any further value added (Cocobod, 2013). Buying companies are increasing their influence with producers, as traders attempt to form direct relationships within the strict governance environment.

Ghanaian cocoa beans have achieved a consistent high quality, and as a result gain a premium on the average international market price (Kolavalli & Vigneri, 2011). This consistent quality has meant that Cocobod is able to sell up to 70% of its exports on the forward market (Barrientos et al., 2008), allowing a degree of protection against volatile seasonal prices not seen in other cocoa-producing countries (Kaplinsky, 2004). Looking to the future, the Ghanaian government is keen to increase cocoa production to meet growing export demand, with worldwide chocolate sales projected to increase by 6.2% in 2014 (Terazono, 2014). However, the current increases in real production are not keeping pace with growing demand. As a key contributor to Ghana’s economy and a provider of high quality cocoa, both the private and public sector have strong motivations for ensuring the development of the cocoa market.

The price setting of cocoa comes under the responsibility of the Producer Price Review Committee (PPRC), made up of representatives from the Ministry of Finance and Economic Planning (MOFEP), Cocobod, buying companies, farmers and haulers, (Kolavalli et al., 2012; Terkper, 2014). As a key decision, many actors try to exert influence, however power asymmetries exist. For example, literature reviews of the Ghanaian system claim “Farmers’ representation on the board of the COCOBOD also means that farmers have a
voice in the board room discussions of the operations in the cocoa industry” (Essegbey & Ofori-Gyamfi 2012: 280). However, in reality there is no effective farmer representation at these meetings (Arm2). In addition LBCs, despite campaigning, have been unable to increase the buyers margin in a number of rounds of negotiation (Domfey, 2014), with recent trends showing it decreasing (Kolavilli et al., 2012), especially as inflation in Ghana reaches 16% (GSS, 2015). Cocobod are not impervious to outside pressures, but in reality this is another area of the cocoa sector where they have control.

4.2 Transforming structures

Outlined in chapter three, we now look at the characteristics of key transforming structures for the research. This includes how they operate, their roles in the market, and some of the motivations they have to perform these roles.

4.3.1 Cocobod

The Ghana Cocoa Board (Cocobod) is a dominant actor in the domestic and international cocoa markets for Ghana. Cocobod has five subsidiary departments: the Cocoa Research institute of Ghana (CRIG); the Seed Production Unit (SPU); the Cocoa Health and Extension Division; the Quality Control Company (QCC); and the Cocoa Marketing Company (CMC). These subsidiaries have exclusive responsibility, backed up by national law, for research into yield-increasing and disease-protecting technologies; the distribution of seeds, fertilizers and pesticides; the maintenance and rehabilitation of cocoa trees; quality control through setting standards; and of cocoa exports (for which it has a monopoly position) respectively (Mohammed et al., 2012). The aim of Cocobod is to promote the production, processing and marketing of cocoa, coffee and sheanut in the most efficient way whilst maintaining industry relations (Cocobod, 2015). In practice the majority of power is within the cocoa sector alone.

The actions of each department can have large effects on Ghanaian cocoa farmers’ livelihoods. However, it is beyond the scope of this research to evaluate the separate impacts. Unless necessary, from this point we will refer simply to Cocobod, regardless of the specific department(s) responsible.

4.3.2 Buying companies

Whilst the effect of Cocobod is undeniable throughout the value chain, it is the buying companies – in this case – that form the main structure of analysis, for acting as the

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4 Codes refer to interviews. See Appendix 3 for further information
direct link for farmers to the rest of the chain. Their core role is to buy cocoa from farmers, and deliver the beans to Cocobod (World Bank, 2013). The Producer Price Review Committee and buying companies are expected to give the minimum price to farmers. Other standards include the payment of bonuses for certification when issued, the accurate and timely reporting of purchases and the prohibition of illegal exportation, all of which invoke sanctions of varying degrees, from fines to the loss of a buying license (Cocobod).

On a local level, buying companies are the actors that directly affect the practices that farmers follow. Many initiatives run by the government rely on the support and capacity of buying companies. Government initiatives, such as mass spraying of cocoa, or training on new desirable practices, are dependent on buying companies having a strong and trusting network of farmers, willing to react positively to advice or directives. However it is predominantly quality control where buying companies are held accountable, acting as the first check for cocoa beans. Both PBC and Armajaro are liable to reject cocoa that has not been fermented or dried properly, rather than risk losses or being reprimanded by Cocobod.

Some buying companies are involved with further value adding activities, and take on extra responsibilities. Two buying companies have been included in this study, the Produce Buying Company (PBC) and Armajaro. Whilst both PBC and Armajaro must meet all standards set by Cocobod, differences arise from Armajaro’s decision to pursue UTZ certification, with the need for greater VCC to meet additional standards and practices. The ways PBC and Armajaro affect farmers’ livelihoods will be explored in Chapter 5, but first their roles within the value chain is given, concentrating on the differences between the two.

4.3.2.1 PBC

As Cocobod’s former purchasing subsidiary, holding a monopoly until 1993 when other private licensed companies were admitted, PBC is the largest buyer of cocoa in Ghana, holding a 35% market share in 2013 (Cocobod, 2013). It is present in every cocoa-growing community holding a wealth of experience in cocoa buying (Laven, 2010). In the Eastern region, PBC does not offer...
certification or methods for farmers to add value. No requirements above the national minimum standards are required, thus giving us an example of basic VCC. In the study villages PBC held a unique position, seen as a long-standing, trustworthy buyer of cocoa.

In each of the communities visited PBC has a full-time purchasing clerk, located at buying offices with large storerooms, reminiscent of PBC’s time as the only buyer of cocoa in Ghana. When a farmer brings his or her cocoa, the clerk’s job is to check the quality of the beans and then pay the farmer. The producer price is given to the farmers, and buyers earn a commission from the cocoa they source (PBC, Interview 2). In turn, the district offices are supplied by PBC that sells cocoa to Cocobod at the producer price plus the buyer’s margin. Once the cocoa has been bought it is transported to Cocobod to be checked again for quality, before being exported at the world Free On Board price (Kolavalli et al., 2012).

PBC is often used by the government or agencies to distribute inputs to farmers. This is more of a unique role for PBC, due to both its experience and access to farmers, and its close ties with the government. Further to this, although not obliged, PBC buyers take other roles within the community. They are able to obtain inputs in bulk, and there are examples of them organising labour for farmers who were unable to adequately attend their farms (FP6; FP23). PBCs are able to give advice, but this generally has to be sought after rather than that it is offered.
4.3.2.2 LBC Armajaro

Armajaro, the second case study, is the third largest buyer of Ghanaian cocoa, with an 11% market share in 2013 (Cocobod, 2013). It is a foreign-owned LBC, initially owned by British parent company Armajaro, but now owned by Ecom, both commodity traders (Agrimoney, 2014). Key to its selection is Armajaro’s decision to ensure its cocoa beans are UTZ certified. This requires extra standards on both the farmer and buyer side (further detailed in 5.2) resulting in the development of advanced collaboration between farmers and buyers.

As with PBC, purchasing clerks are in each community in which Armajaro is present, and although they were present in each community used for interviews, they are not present in all cocoa-growing communities. They also work in smaller offices than PBC buyers, and often have a second job in the community. They report to a district manager, whose responsibility is again to make sure funding is available for buyers to purchase cocoa. However, with international links and certified cocoa, Armajaro has additional motives compared to PBC. Farmers must meet additional UTZ standards (UTZ1) and these need to be both supported and monitored by the local purchasing clerk (Arm1). Commercial officers, who help support farmers, administer training, and aid farmers in procuring inputs for their farms. ‘Lead farmers’, who have been chosen for exemplary farming practice, have strong community connections and are able to assist in the organisation of farmers at the community level.

The Armajaro value chain is made more complex by the certification programme. For its core function, delivery of cocoa to Cocobod, the funding is the same, coming from Cocobod as cocoa is delivered to central stores. However, Armajaro must ensure that the value added through certification is captured. By organising buyers of certified cocoa themselves, international traders then request Cocobod for cocoa that has been sourced from Armajaro. Whilst Cocobod are not involved in certification and require the same price for all its cocoa, they do separate certified beans from other sources at the request of Armajaro to facilitate the certification chain. The added value is then given to Armajaro directly from the buyer, and a proportion of this is passed on as a price premium.
4.4 Transforming processes

Chain actors interact through transforming processes, and this section highlights three structures that impact farmers’ ability to claim autonomy. VCC is the main unit of analysis, but we will not ignore other significant processes.

4.4.1 VCC

Value chain collaboration (VCC) (see 1.1) is the main transforming process, where small-scale farmers and buying companies interact. In this study we have made the distinction between basic and advanced VCC. Basic VCC forms the relationship between PBC and farmers, and is typical of the minimum amount of collaboration that is needed to satisfy Cocobod’s minimum standards. As will be discussed in Chapter 5, the aim of its buyers is simply to source as much standard-matching cocoa as possible and PBC is under no obligation to go further than this (Kolavalli, 2012). However, it should be noted that the company is successfully trialling UTZ certification in regions other than the Eastern region (Interview, PBC 1). This, however, did not have an impact on the buyers approached, and indeed it was not common knowledge to buyers during fieldwork conversations.

Advanced VCC occurs between LBC Armajaro and farmers that seek to become UTZ-certified, taking a proactive approach to rising standards, adding additional value and enhancing cooperation between farmers and their buyer (Jaffee, 2003). Sustainability is at the core of the UTZ programme, and with demand for sustainably produced cocoa expected to reach 50% of total world demand by 2020 (Wegner, 2012), there is a strong
incentive for Armajaro to ensure farmers are able to meet their developing demands. As an illustration, between January and September 2011, sales of UTZ-certified cocoa increased by 149 per cent compared with same period the year before, totalling 29,719 metric tons (Wegner, 2012). To match expectations, extra conditions have to be well-communicated to farmers, additional support must be given to enable standards to be implemented, and monitoring must occur to ensure practices are being consistently followed, leading to an advanced form of VCC. Standards are implemented gradually over a 4-year period, and are placed on both farmers’ and Armajaro’s practices.

4.4.2 Alternative markets

Other transforming processes, whilst not the explicit focus of the research, play a large role in how VCC affects farmers’ livelihoods. Access to alternative markets is key for small-scale cocoa farmers, who rely on a range of crops, namely cocoa, oil palm and food crops. Separated into these three groups we can explore their fundamental characteristics. Cocoa is an international cash crop, and through government intervention farmers have a guaranteed market for their crop. Oil palm is also seen as a crop mainly for income, but individuals can process it into palm oil themselves. There are two main marketing routes. The first is through a large oil palm buyer in the region, the Ghana Oil Palm Development Company (GOPDC), which also aids farmers to plant their crop and offers a given price, relative to world prices. The other is through local buyers, mainly women, who buy raw produce to process themselves at home, and where prices are negotiated with the seller per transaction. Food crop markets are mostly locally based, with small daily and larger weekly markets occurring in villages. Prices for food crops depend largely on the local supply of each crop and prices can vary dramatically throughout the year, depending largely on actors’ bargaining positions.

4.4.3 Culture

Livelihoods can also be affected by the surrounding culture, including societal norms and accepted hierarchies that impact individuals’ behaviour (DFID, 1999). This study cannot adequately address the cultural aspects of Ghana, however as an illustration we can rely on Hofstede’s (1984) measurement of cultural dimensions. These were originally developed over a 15-year period, and presented in 1984, but have since been continually developed by independent researchers, the ‘Hofstede Centre’ and various additional papers/books.
These allow us to add extra contextual understanding that will help in the analysis of results. From Figure 4.3 (Hofstede Centre, 2015) we see six scores. *Power distance* is high in Ghana, indicating the culture is one that both expects and accepts unequal distribution of power; people are willing to accept hierarchies and are less likely to challenge them. *Individualism* reflects the degree of interdependence, and with a low score Ghana is a collectivistic society where people make a long-term commitment to the wellbeing of the group to which they belong, where business decisions are heavily impacted by group ties, for example family ties or church liaisons, and where trust and loyalty are extremely important in relationships. *Masculinity* is a less well-defined measure, but tries to differentiate the importance of achievement and material success (masculine) from relationships, caring for the weak, and quality of life (feminine). Ghana scores 40, indicating moderate femininity, which can also be linked to the collectivist nature. *Uncertainty avoidance* is how able society is to accept unknown or ambiguous situations, and we see a preference for uncertainty avoidance; people are likely to prefer known outcomes and work to make institutions that facilitate this. *Long-term orientation*
measures the balance between the importance of past tradition/ideas and the future need for adaptability and preparedness for the future. Ghana has an extremely low score, indicating the strong belief in traditions and norms, whilst seeing societal changes with suspicion and a focus on quick results. Finally indulgence measures how far people try to control their desires. With a high score, the culture in Ghana is one that seeks to meet desires, with importance being put on fun and leisure time. For our research into how VCC affects autonomy, we can take a lot from the scores of power distance, individualism, uncertainty avoidance and long-term orientation as impacting the way in which farmers are likely to interact with PBC and Armajaro, and some of the findings can be well explained by cultural aspects.

4.5 Some characteristics of cocoa farmers in the study area

To provide an accurate portrayal of Ghanaian cocoa farmers, this section will use previous studies across Ghana alongside data collected as part of a baseline survey of 144 respondents (see Chapter 3) living in the Eastern region of Ghana. Many of the trends found in previous studies are repeated in our study area.

As with all farmers in Ghana, cocoa farmers are generally small-scale, often working with less than five hectares. Nonetheless, small-scale farmers dominate production (Asante-Poku, & Angelucci, 2013) and farming is vital to their livelihoods. For the respondents in our baseline survey, 70% indicated the head of the household was a fulltime farmer. For the spouse of the household head, fulltime farmers made up 55% with a further 33% as part time farmers (Baseline Survey). In terms of sex, Barrientos (2008) found income inequality between men and women from farming. Men were much more likely to own a farm than women, who usually worked on their husbands’ land without any legal ownership. Whilst this thesis took a household perspective and was not able to address household inequalities, it was noted that 77% of respondents were male. Further, 83% of households reported the head of the house as male, and in the 24 cases of a female being the head of house, 19 were accounted for by the lack of a male spouse, suggesting a strong male bias.

Ghanaian cocoa farms typically have low yields, around 400 kg per hectare, below other cocoa-producing countries, particularly Indonesia and the neighbouring Côte d’Ivoire (Terazono, 2014), and well below the 1000 kg per hectare that Cocobod has targeted (Barrientos et al., 2008). The baseline survey reported 3.6 hectares as the average area used for cocoa production (Baseline Study), in keeping with the assertion of dominance in the sector by small-scale farmers. Yields among cocoa farmers involved in
the baseline survey for this research were an average of 264 kg/hectare, however this data relies on farmers’ own reporting for land size and annual production.

Despite low productivity, which can lead to low incomes (World Bank, 2013), cocoa reportedly accounts for 67% of cocoa-growing households’ revenues (Kolavalli & Vigneri, 2011), a finding repeated by Barrientos et al. (2008) where farmers acknowledged the importance of cocoa as their main source of income. Within our study reliance was less severe. Median income per year was $16705, only slightly below the Gross National Income (GNI) per capita for Ghana, standing at $1,910 (World Bank, 2014). Of this, crop income accounted for, on average, 50% of income (Baseline Survey).6 However cocoa remains precious to farmers: 79% of cocoa farmers put cocoa as their most important crop, with 100% of farmers putting it as either the most or second most important crop they own (Baseline Survey). For small-scale cocoa farmers in Ghana, additional crops almost always supplement cocoa production (Kolavalli & Vigneri, 2011). Indeed, only 8% of cocoa farmers included in the baseline survey reported selling cocoa exclusively, and each of these households had home gardens, where food crops are predominantly grown (Baseline Survey). The second most popular crop among baseline survey respondents was oil palm, with 20% putting it as their most important, and 66% putting it within the top two (Baseline Survey). Outside of farming, 73% of households report additional employment outside of their farms, indicating that diversification is common.

Barrientos (2008) claims that farmers are not enthusiastic about their ability to drastically improve their livelihoods within cocoa as profitability of cocoa falls despite increases in world prices (Kolavalli & Vigneri, 2011). One of the main aspirations of farmers is to provide income to pay school fees so that their children may enter formal education, illustrated by the 93% of farmers who put school fees for education in their top 3 uses of income, with 69% putting it as first priority (Baseline Survey). Encouragingly, all respondents reported to have access to both a pre-school and primary school within 2 km, and 95% had access to a secondary school (Baseline Survey). However current farmers’ education is low: 16.7% reported having no formal education, 37.5% had not completed secondary school, and only 6.9% of people had completed education past secondary school level.

5 11800GHS:1670USD as of 16/06/2015.

6 It should be noted that the baseline survey includes a broad range of farmers, including some with high alternative incomes.
Barrientos et al. (2008) describe an “exodus of youth from the sector” (p. 10), and an ageing population is seen as a key risk for the sector as a whole (Laven, 2010). Within the study area, the average age of cocoa farmers was 53, slightly older than previous studies, and additionally it was seen that only 12% were below 40, confirming current concerns of low levels of youth entry (Baseline Survey).

4.6 Conclusion

As set out in the theoretical framework of Chapter two, both the SLA and a value chain perspective have been integrated. The cocoa value chain within Ghana has been detailed using existing studies, with particular focus on the specific link between farmers and buyer. Chain actors, their activities and their interactions have been presented as transforming structures and processes. It is clear that, within a well-regulated market, Cocobod has a large influence on other actors. However different strategies for buying companies exist. PBC and Armajaro illustrate two levels of VCC that we have separated into basic and advanced respectively. Additional markets have a role to play in cocoa farmers’ ability to mitigate risks, and the cultural background of Ghanaians also heavily influences farmer decisions. Finally the characteristics of small-scale Ghanaian cocoa farmers have provided context on the population as a whole, and the region in which data was collected, using both existing literature and the baseline survey completed as part of this research.
5. Value chain cooperation

This chapter builds upon the contextualisation of Chapter four, where the characteristics of the actors involved in the value chain, their interests and institutional arrangements they work within were covered. Whilst adding further detail on these aspects, the specific actions and power relations that exist within basic and advanced VCC will be the subject of this chapter (research question 1) and the effects thereof on farmers’ assets, notably social and human capital (research question 2). Comparison between basic and advanced VCC highlights how livelihood assets are affected, before a more general comparison is made highlighting the search for mutual benefits within advanced VCC.

5.1. Basic VCC

This section analyses basic VCC between farmers and PBC, and the impacts on farmers’ livelihoods. We find that basic VCC results in a limited supporting role for PBC, and farmers relying on many other actors. This limited role does little to improve livelihood capitals, but as will be discussed in Chapter 6, also does little to infringe upon farmers’ autonomy.

5.1.1. Motivations for investing in basic VCC

Within the cocoa value chain, the need for collaboration is clear. There is global demand for cocoa; for Cocobod to meet that demand, LBCs must source cocoa from thousands of small-scale farmers. Basic VCC is defined by PBC’s need to source cocoa with minimum standards, and farmers’ need to gain profit from cocoa farming. The main benefits for PBC are obvious. Firstly, the more cocoa meets required standards, the more profit PBC will make. Secondly, increasing (or maintaining) PBC’s producer base through VCC ensures a consistent supply of cocoa beans to be delivered to Cocobod. Farmers’ benefits are also clear, predominantly through the access to international cocoa bean markets. As highlighted in Chapter four, cocoa is important for livelihoods, with farmers valuing the income (FG17), fixed prices (FG2) and constant demand (FP228) with farmers appreciating the link to cocoa markets.

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7 FG refers to information from a Focus Group, see Appendix 3 for more details.
8 FP refers to an interview with a farmer who sells to PBC; see Appendix 3 for more detail.
Reasons for choosing PBC over other LBCs are varied, but common trends are clear. From the baseline survey, we see 17% of farmers giving trust as their main reason, reflected during interviews as the recognition of PBC’s size and experience (FP21). One PBC buyer used a Twi proverb, “panyin de panyin” (PBC1), to describe the role PBC holds in society, translated to “an elder is always an elder”. PBC has been in communities since independence, developing a strong reputation with communities that put great emphasis on tradition and experience. Also repeated by farmers is the concern that other buying companies cheat them through weighted scales, whereas trust is put into PBCs buying practices (FP28).

5.1.2. Communication and social capital within basic VCC

Communication within basic VCC is sporadic with no formal arrangements. There are farmers who have no interaction, other than to sell their cocoa (FP2), where communication is concerned only with the quality of the beans (FP1). Neither are there clear ways to contact farmers, with ‘lead farmers’ used in some communities (PBC1), or word of mouth being trusted in others (PBC2). However, in terms of access to buyers, there is almost always someone available if farmers are seeking a representative.

There is agreement between farmers that they are limited in their ability to voice their opinions. One farmer described the situation as follows:

“When I was young, my father was selling his cocoa here, so when I became a cocoa farmer, I also started selling my cocoa here. I have never sold my cocoa to any buyer except PBC because my father was doing it here.”

PBC Farmer

“Here nobody calls for meetings between farmers and the LBC, so you don’t get the chance to ask things that you want. All that we do is to sell our cocoa and take our money” (FP7).

This might be what we would expect from basic VCC, but it shows a desire from farmers to go beyond this (FP28), and calls for leadership to give farmers a voice (FP2). Buyers recognise this lack of feedback, but meetings are reportedly arranged on occasion to discuss cocoa production, occasionally with officials from Cocobod (PBC2). There was no mention of these by the farmers, however, and it is easy to see how infrequent meetings that rely on word of mouth would not reach all farmers. Instead of formal communication, basic VCC relies heavily upon trust and tradition, with farmers being committed to PBC and the sustained role it has played in cocoa buying.
Farmer-to-farmer communication varies, depending on the community or individual. At one end, farmers report a complete lack of communication between themselves and other farmers (FP28). Others report informal talks on journeys to and from cocoa farms, where yields, agricultural practices and the use of chemicals are discussed (FG1). This has significance, with farmers being able to offer advice to one another, but this mainly occurs during times of specific need rather than regular discussion. At the national level, there is an official cocoa farmers union that all farmers are automatically signed up to (Cocobod2). However, this is not representative of farmers’ needs, with the organisers using their position of power to enhance their own situations (Cocobod2), and being of completely different scale to small-scale farmers, harvesting large amounts of cocoa (Arm2). In fact when asked about farmer organisations, cocoa farmers interviewed did not mention this group a single time. There are many reported barriers to farmers organising themselves. The attendance of farmers is a problem (FG2), with the expectation that, without instant benefits or incentives, many farmers would not continue participation. Also apparent during research was that all ideas of how an organisation would run relied on executives and leaders, rather than farmers themselves. Farmers understandably lack organisational skills, and do not see the potential for benefits without more powerful actors included. These link to conditions within VCCs, but also the cultural constraints that were discussed in Chapter four. In this case, particularly the ‘power distance’ measure is apparent, with farmers accepting high power disparities.

Farmers typically feel separate from actors further along the chain, and use buyers to pass on concerns, although little faith is held in this resulting in changes for farmers’ livelihoods (FP27). Farmers’ main interactions are through those visiting local communities. Visits of extension officers, who train communities on behalf of Cocobod, are one way for farmers to communicate with other actors (Cocobod1) and Cocobod may interact with farmers directly if conducting research (Cocobod2). Other than this there is no direct communication between small-scale farmers and actors further up in the chain.

Social capital is limited within the basic VCC studied. Communication is almost exclusively restricted to farmers selling their cocoa and can hardly considered a social resource in support of a person’s livelihood. Farmer-farmer communication is not impacted by PBC, and is used in times of need to solve specific problems, rather than to pro-actively innovate. Links with other actors are rare, and rely on opportunistic farmers and visitors to the community. Farmers inevitably communicate with each other but PBC does not act
to enhance this, and many of these interactions cannot be classed as social capital as they will not lead to improved livelihoods.

5.1.3. Knowledge sharing and human capital within basic VCC

Knowledge sharing is not common in basic VCC, and farmers mainly rely on other actors – both other farmers and actors further along the chain – for knowledge. Meetings between PBC and farmers were reported, aiming to educate farmers on best practices, predominantly on the fermentation and drying of cocoa, but also the importance of pruning trees. However these fall below expectations for farmers seeking to expand their knowledge of cocoa-farming practices. One farmer reported their farming knowledge was lacking, as their cocoa trees were close to dying and they do not know how to rejuvenate them (FP1). Another reported not being able to read the weighing scale at PBC, relying upon others to ensure she was not cheated (FP23). In addition, there is no on-going support. It was through the yield that one local buyer claimed to understand the practices farmers undertake, with low yields meaning a lack of good practices (PBC2). However due to the lack of farm visits buyers cannot know if practices are being followed or understood (PBC1) and so do not fully understand individual farmers’ contexts or concerns.

With little training within basic VCC with PBC on how to successfully grow cocoa (FP6), farmers rely on knowledge gained from other farmers (FP7), their own experiences (FP1) and government extension officers (FG1). The majority of learning comes from previous generations, followed by knowledge picked up from observing and communicating with other farmers. The number of extension officers is too low to be able to reach all cocoa farmers (FG1; Cocobod1) despite their input being identified as key (FG1-3). Farmers report increases in yield (FA4), improvements in agricultural practices (FA14) and greater confidence in advising other farmers from formal training sessions (FA8-9, 20).

During interviews it was clear that farmers could recount many ‘good agricultural practices’ such as weeding, pruning and using fertilisers. However, justifications for these were less forthcoming, and it was clear these were followed less rigorously (Arm2). This indicates that farmers know what they should do, having learnt or observed from one of their sources of knowledge. However they are not clear on the necessity of such practices, and so are less inclined to follow them explicitly.

Farmers report no healthcare provision (FP2), however there are examples of buyers taking account of farmers’ health when tailoring support. For instance, for some

“You can’t do your cocoa with only your own knowledge”
Focus Group response
elderly farmers there are people that collect their cocoa. There was also one buyer who was reported to have helped multiple farmers in times of need, organising labourers and sourcing inputs to maintain farms, especially during times of ill health (FP23-26). However this is not required within basic VCC.

In conclusion, we see a large need from farmers for support that is not being met within basic VCC. PBC gives limited provision for improving farmers’ human capital, although not all farmers access these. The need is accentuated by the lack of other actors able to provide expert knowledge on agricultural practices and the risks of products readily available on the markets. As with social capital, actions are reactive, responding to a need when it comes up.

5.1.4. Access to other assets in basic VCC

Financial capital

Access to finance is vital for farming households to overcome income fluctuations, with a substantial part of crop income used for daily food, maintaining investment in farming activities, and upkeep of a household’s livelihoods through education and healthcare, as seen in Chapter four. For 24.8% of cocoa farmers the main reason for choosing a particular buyer was ‘access to finance’, and an additional 10.5% said ‘availability of money’ (Baseline Survey), reflecting the importance of the buying companies’ role as creditors, often the first person farmers contact when in need of finance (FG2).

For PBC, all buyers have the ability to offer finance to farmers, although most managers do not encourage this (PBC2). Despite this, the practice of advancing money is widespread (FG1-2; FP3; FP6; FP25), and farmers report that even when funds are unavailable, if the need is great, buyers can source additional finance from the district officer (FG2; FP22). Money lending depends on trust (PBC2) and the amount of cocoa produced (PBC1; FP22). Debt is interest free, being subtracted from the next cocoa crop/s (PBC1).

This is not accessible to all, or at all times. Some farmers report being unable to access credit from buyers (FP9) and must rely on other sources, including oil palm buyers (FG2) and informal lenders. Farmers can use cocoa as collateral, agreeing to lend their farmland to creditors in return for money. The lender recoups the debt by selling the cocoa produced for a specified number of seasons, depending on the amount borrowed (FG2) and annual yield (FG22). However, using cocoa as collateral is only acceptable with
informal lenders, meaning credit from banks is not accessible for most farmers (FG2) and none claimed to have successfully gained a loan from a bank.

Buyers face risk when providing credit, and limit their lending accordingly (PBC2). However, with PBC having experience with cocoa farmers, buyers are able to make accurate judgements (PBC2). In turn, farmers are unwilling to cheat on such a long-standing partner (FP22). Particularly when finance is for inputs on cocoa farms, buyers are likely to reap benefits from increased cocoa stocks and loyalty felt by farmers.

*Physical capital*

The main tool used by farmers is a cutlass, used for pruning trees, weeding and harvesting cocoa beans (FP7). However other common equipment includes sickles, also for harvesting beans, and knapsack sprayers, for spraying chemicals (FP3). These are easily accessible to farmers from local stores (FP3), and are not provided by PBC.

Farmers also use fertilisers and pesticides (FG2), which can again be bought from local markets (FP6), provided by the government (FP3), or gained from the local buyer on credit (FP23). Farmers see fertilisers and pesticides as necessary for high yields (FP25), but problems exist in gaining access. Purchasing chemicals is difficult, since individuals are often not able to verify brands, and these chemicals can be prohibitively expensive. Farmers therefore simply wait and hope that inputs will be provided, putting their faith in the government (FP1). When provided free by the government problems exist with distribution, with some farmers not receiving inputs whilst others sell excess (FP3). Corruption exists at higher levels of government, leading to inefficiency and deliveries often not being on time (Cocobod1). Buyers can also play a role, supplying better deals for farmers through bulk purchases, and farmers appreciate these services (FP25). However, again there is no mandate for this to happen, meaning this service is entirely dependent on the capabilities and motivations of buyers, and is not present in other communities (FP6).

Farmers within basic VCC can benefit from increased access to inputs, but education on the application is missing. Extension officers, on behalf of Cocobod, provide knowledge and training at times (FP3), and advice is also gained from those selling chemicals (FP2). However in one case, a farmer was recommended to buy DDT, a toxic chemical banned in most countries, so advice is not always helpful. With limited social and human capitals, it is difficult for those within basic VCC to know that they are applying the right inputs in the best way.
Natural capital

Natural capital, for farmers, is measured simply by their yield on a yearly basis. In this regard, there is no obvious influence of basic VCC on natural capital. Farmers identify the need for fertiliser as a consequence of low yields (FP30), but have no objective way of confirming this. For knowledge on the quality of land, farmers rely on extension officers (FG1), or use the farms surrounding the area to inform their crop choice (FP2). However this is not certain, and land can quickly become less fertile if fallow times have not been long enough (FP6). The issuance of fertiliser is the only way in which PBC encourages the sustenance of farmers’ natural capital.

5.2. Advanced VCC

This section analyses motivation for advanced VCC and effects on farmers’ livelihood assets by focussing on Armajaro’s relationship with farmers, and the certification programme that drives advanced VCC.

5.2.1. Motivations for investing in advanced VCC

Compared to basic VCC, actors need additional motivations to go beyond national minimum standards. This motivation comes from two main sources. The first is the rising consumer concern with ethically sourced products. In response, certifying companies such as UTZ Certified offer assurances to consumers. The requirement for improved standards calls on both farmers and buyers to enhance the way they collaborate and how cocoa is sourced (UTZ Certified, 2015). The second is from increased sensitivity of buying companies to risks of supplier failure. This has been internalised by Armajaro’s employees, who rationalise that “if the farmer is healthy, we are likely to get more cocoa, but when he is sick we are not likely to get more cocoa” (Arm1). Farmers also recognise this collaboration: “we get more yield for our cocoa so that they can also get more to buy” (FA14). These seem obvious, but historically small-scale farmers are taken for granted at best, or exploited at worst, with companies not looking beyond the amount of cocoa they receive. A certification officer for Ecom and Armajaro summed up the shift in attitude:

“The idea of caring for the farmers was there previously but I think that people just overlooked it... They realised that now we have to come back and look at the

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9 FA refers to an interview with a farmer who sells to Armajaro; see Appendix 3 for more details.
A clear advantage of advanced VCC is the ability to add value to cocoa through certification and gain a price premium (UTZ1). These certification practices result in more sustainably sourced cocoa, ensuring Armajaro’s long-term supply of cocoa. There are, however, also costs involved in running certification. Armajaro must ensure it has invested heavily in its business operations, including clear policies for workers’ rights, comprehensive internal tracking systems and training for promoting certification standards (UTZ Certified, 2015). The cost of initially contacting farmers is one of the largest costs (Arm2) but extra staff are also required to administer training and monitor successful implementation.

This bonus is one of the main benefits of advanced VCC, reported by farmers throughout both interviews and the baseline survey. The bonus is for 15 Cedis ($4) per bag (62.5kg), and is paid after cocoa has been received, usually during the off-season and timed to aid farmers when fertiliser is needed on farms. Farmers also benefit from the training given by Armajaro, both directly (i.e. in applying practices that improve yields) and indirectly (i.e. from improved incomes meaning investments in livelihoods can be made, such as in children’s education). Costs are predominantly from practices that farmers have to forgo to achieve certified. For example there are banned chemicals (FA20), a ban on hunting (FA14) and the additional agricultural practices to follow (FA9). These practices are however, reported to have really helped farmers, and so it is not clear if they truly see these as costs.

5.2.2. Communication and social capital within advanced VCC

Communication is key to being able to achieve certification standards within advanced VCC. Armajaro relies upon locally based buyers (FG3) and lead farmers to organise farmers, and these lead farmers look upon this responsibility positively (FA5). Formal meetings between Armajaro and farmers are regular (FA14), with Armajaro providing advice and training (FA18) as well as organising certification groups where farmers are able to discuss problems relating to their certified cocoa (Arm2). Attendance to meetings can be an issue for Armajaro, which
offers small incentives, such as small pieces of food and sometimes inputs, to encourage farmers to attend. The commercial officer for the region also aims to visit communities, and conducting farm visits is also a regular occurrence (Arm1). This ensures that farmers can report problems, such as diseases on their farms; that they are following certification standards; and also gives the commercial officer a chance to give a ‘pep talk’ (Arm1).

Regular contact gives farmers the impression that they are valued (FA16), and they feel confident in their ability to communicate their needs to Armajaro (FG3). For example, in the case of competing deals from other LBCs, farmers report that they would first communicate an intended change of buyer, and their intentions to move, before abandoning Armajaro (FG3). Having this relationship is a clear advantage for Armajaro in identifying and matching competition (Arm1). With increased communication, LBCs are able to identify risks to their supply of cocoa and be proactive in retaining their farmers’ loyalty.

Farmers from different villages each claim that there is good interaction between themselves, specifically within certification groups (FA4) (FA15) (FA20). This also extends to farmers who do not sell to Armajaro, where farmers share the knowledge gained (FA8) and spread both the cause and benefits of certification within their networks (FP9). This is in clear contrast to basic VCC, where farmers only occasionally share their experiences and have no formal organised meetings.

As with PBC farmers, there is a distinct disconnect between farmers and actors upwards in the chain, with farmers citing long chains of executives and ministers through which complaints can reach the president (FG3), whilst remaining unclear as to how realistic they are. This similarity indicates that within both forms of VCC, farmers do not have access to actors further along the chain, and are reliant upon communication with their buyers for concerns to be heard by other actors (FG2).

To conclude, it is clear that advanced VCC positively affects social capital. The greatest effect is through direct contact with buyers, where farmers are able to communicate concerns and, as a consequence, feel valued by Armajaro. However, by setting up certification groups, farmer-farmer interaction is also enhanced, benefitting other farmers in the community. There are, however, strong disconnects between farmers and those working beyond buying companies.

“I only know my LBC, so if I’m in need, they are the immediate person I can contact”
Focus Group Respondent
5.2.3. Knowledge sharing and human capital within advanced VCC

Farmers gain training on certification standards and agricultural practices during regular sessions with both commercial officers and external trainers. The training is reported to have increased farmers’ knowledge (FA4) where pruning has increased (FP8); planting of trees is equally spaced (FA5); cocoa seedling nurseries have been set up (FA4); and farmers know the ‘correct’ chemicals (FA4), fertilisers (FA9), and how these should be applied (FA17). Armajaro farmers also still report learning from other sources, such as extension officers (FG3) and other companies holding training sessions (FP8). Certification groups, as mentioned, also encourage farmers to support each other (FG2), and are a valued source of knowledge (Arm2).

Yields, after following certification practices, are reported to increase from around three or four bags per acre (although this can be as low as one or two) to between six or eight bags per acre (Arm1-2; UTZ1). Although exact data are lacking, yield increases are generally agreed by farmers, with some farmers now able to harvest cocoa during the off-season (FA8). Training also helps justify certification practices; farmers are given and able to explain the reasons behind practices such as planting (FG3), enhancing biodiversity (FA9), replenishing soil nutrients (FA20) and how pruning and spacing trees increases air circulation (Arm19), all capable of increasing cocoa yields. Farmers showed a clear understanding of not only what to do, but also why. They are not passive receptors of instructions, but also educated on the rationale behind practices.

Photograph 5.1 – Pruning cocoa regularly ensures optimum yields
This had clear effects described by both farmers and buyers. Farmers within advanced VCC show great confidence in training others (FA14). One farmer holding multiple farms, applied certification practices to all farms, even when the bonus was not received (FA7), showing how training alone can help farmers through yield increases alone. This adoption of practices is even true for experienced farmers (FA8), and the supervision provided by Armajaro within advanced VCC helps maintain farmers’ motivation to continue implementing these practices (Arm2).

Health aspects form a focus of advanced VCC, offering clear mutual benefits when addressed successfully. Spraying is a particular risk; Armajaro fully trains selected farmers in communities, giving them full safety clothing as well as health check-ups every three months (FA9; Arm1). Armajaro then encourages farmers to use these local sprayers rather than apply their own agro-chemicals, although this can be difficult, as farmers prefer to complete their own spraying. Armajaro does not hesitate to make it clear how dangerous these chemicals can be. Effects can be delayed by years, causing impotency, blindness and even death when there is too much exposure to chemicals (Arm2). If farmers are healthy, they will be able to spend more time maintaining their farms, gaining greater yields and greater incomes from cocoa, whilst providing Armajaro with a greater amount of cocoa (Arm1; Arm2).

We can conclude that, with dedicated training for farmers and follow-up support from fellow farmers and the buyers/officers of Armajaro, there are increased cocoa yields. Farmers enjoy confidence in the techniques used and knowledge of the risks of cocoa farming inputs. In a continued contrast to basic VCC, there is a proactive mind-set looking to address problems before they affect farmers’ productivity.

5.2.4 Access to other assets in advanced VCC

Financial capital

Armajaro also plays a vital role in providing credit for its farmers (FG3). In similar fashion to PBC, credit is lent on the basis of trust and the amount of cocoa produced (FG3) and is repaid at the point of sale of the next cocoa harvest (FG3). Credit can be refused (FA9), and in this case there is little that can be done (FA8), but farmers claim that increased access to credit for input provision would improve their livelihoods (FA9).
The risk that Armajaro buyers take on is also comparable, with the fear that farmers simply take the money and then do not return being a real threat of which buyers are aware (Arm1). Without a strong history in Ghana, Armajaro faces lower loyalty from farmers, who make it clear that if a Armajaro is not able to pay them, or does not offer credit when asked, they will try other buying companies instead (FG1). In this position, Armajaro faces the risk of losing loans, or losing their farmers’ certified cocoa, and problems in repayment have recently called a halt to an input provision scheme in one region (Arm1).

**Physical capital**

Farmers within advanced VCC use the same equipment as other farmers (FA4), but differences arise concerning inputs. Armajaro farmers have the same access to government-run schemes (FA8) but one significant difference already discussed in 5.2.3, is the training received on the application of chemicals and risks involved with different varieties.

As with basic VCC, within advanced VCC efforts are made to supply inputs, and farmers benefit from group purchases at discount prices (Arm1; FA17). However these are institutionalised in certification, and it is a condition that Armajaro makes these efforts in every community (UTZ Certified, 2015). Farmers can use the premium they receive from certification to buy fertiliser from Armajaro (Arm1; F16), or, as with PBC, are able to obtain inputs on credit (FA9). In addition inputs are used as a motivation for farmers, with instances of cutlasses being awarded to those who dry their cocoa well (FA12). Advice on seeds is given (FA5), along with training on cocoa plant nurseries (FA9) to help farmers rely on their own sources of seeds rather than having to buy them. However farmers are constrained in the sense that they cannot use banned substances (UTZ1) and face reprimands by Armajaro if they are found to have used illegal chemicals (FA20; Arm2).

In conclusion, again we see a strong mutual benefit between farmers and buyers, which is addressed more thoroughly within the advanced VCC. Armajaro identifies the use of fertiliser and chemicals as one of the reasons that their stocks of cocoa have been increasing (Arm1).

**Natural capital**

As part of the UTZ certification scheme, there is a large drive for sustainability. Armajaro want farmers to increase their yield on their current land, rather than just plant more cocoa (Arm1). There is concern for the protection of reserved forest (Arm1; Arm2),
and reserves cannot be violated if farmers are to become certified (UTZ1). Many practices that will increase farmers’ yield, such as use of fertiliser and shade trees, will also improve natural capital and are not difficult for farmers to follow. Aspects that can be harder to implement are those that do not impact cocoa directly. For example, farmers should not hunt, and should dispose of fertilisers/chemicals in water streams, and it is hard to see how offenders can be effectively pursued.

5.3. Synthesis: comparing the two forms of VCC

We have made the distinction between basic VCC and advanced VCC in general terms, but in this section we explore the difference by directly comparing the results from the previous two sections.

5.3.1 The effect on livelihood capitals

During analysis of basic and advanced VCC, clear differences in the effects on livelihood assets have emerged. These were quantified during interviews with the use of a Likert scale, and help us understand the qualitative findings. The first finding is that no farmers reported an overall negative change in any of their livelihood capitals, despite dissatisfaction shown during some interviews.

![Figure 5.1 – Changes in livelihood assets](image)

For social, human and natural capital there are large differences between reported changes for basic and advanced VCC. These results are expected, and repeat what was found during qualitative analysis of interviews. Within social capital, the biggest difference was seen in support of farmer-farmer interactions: advanced VCC scored a whole level higher than basic VCC for farmer-farmer interaction (3.4 vs. 4.47). This was clear in the
support farmers showed for certification groups and regular meetings with Armajaro. Human capital showed a large gap for the impact of knowledge of cocoa: advanced VCC averaged 4.6, almost a maximum score, for the impact upon knowledge of cocoa, vs. 3.6 for those within basic VCC. In contrast, only small differences existed for knowledge on other crops; advanced VCC still gave a higher score, but by only 0.33 of a level. The aim of certification within advanced VCC is to promote sustainable practices of cocoa farming, and so a difference in the score for the effect of VCC on natural capital in favour of advanced VCC (4.07 vs. 3.36 for basic VCC) could be expected, as they are the main avenues of training farmers to achieve these goals.

Differences between basic and advanced VCC as regards their effect on financial and physical capital are smaller, both below 0.5. These are not the focus of the advanced VCC selected, but it is surprising that financial capital shows a negative correlation with advanced VCC participation.\textsuperscript{10} From the qualitative data we see that relationships have been built up over a much longer period of time for PBC, and many farmers report that they have always, and always will, sell their cocoa to PBC. With this level of trust between buyer and farmer, it can be less of a risk to offer credit to farmers, which may explain the difference in farmers’ access to financial capital in both forms of VCC.

<table>
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<th>Table 5.1 – Table of basic characteristics of interview respondents</th>
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<td>Women Respondents (%)</td>
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The differences between the types of farmer that are attracted to either form of VCC should also be noted, shown in table 5.1. There was only one woman interviewed as taking part in advanced VCC, whereas there was an even split in basic VCC. Armajaro report that training is gender neutral and certification requires women’s participation to be

\textsuperscript{10} One limitation with the measure of financial capital is that it was measured using only access to credit as an indicator.
encouraged (UTZ1). However they accept that who wants to come, will come (Arm2). The average age of those within advanced VCC was 5 years younger, and their education level, on average, was a whole level higher. There is a clear difference in those completing secondary school education. This has implications for the extent to which advanced VCC can be called inclusionary, as it seems to appeal much more to younger, more educated males, a group that is often the most powerful in communities.

5.3.2 Difference in mutual benefits

Another difference concerns the realisation of mutual benefits. Many problems within basic VCC are not due to conflicting interests. If farmers’ ability to produce cocoa is constrained, both farmers and buying companies are affected. Within basic VCC, there is limited evidence of PBC aiming to tackle issues that can lead to production constraints. For example, without ever visiting farms, there is no way for PBC to know what practices their farmers are following. The only consistent mutual benefit occurs at the point of sale.

Instead, advanced VCC promotes mutual benefits. In the case of Armajaro and farmers, there is an understanding that higher production of cocoa will provide mutual benefits (FA14; Arm1), and this is the main motivation for Armajaro to pursue certification standards. Many of the practices employed by Armajaro, including training of farmers on agricultural practices and healthy farming, input provision and regular contact with farmers, are central to their business. They result in farmers being able to provide greater quantities of cocoa, without harmful substances. Farmers should be healthier, and again able to produce for a longer time with less time off. More inputs means that farmers are able to apply sufficient agro-chemicals to their farms, sustaining production and income over time, and finally, regular contact means that Armajaro can be sure its efforts are not in vain, and that they are able to maintain their producers in an environment of high competition.

5.4 Conclusions

This chapter builds upon the contextualisation of Chapter four, where the characteristics of the actors involved in the value chain, their interests and institutional arrangements they work within were covered. Whilst adding further detail on these aspects, the specific actions and power relations that exist within basic and advanced VCC will be the subject of this chapter (research question1) and the effects thereof on farmers’ assets, notably social and human capital (research question 2). Comparison between basic
and advanced VCC highlights how livelihood assets are affected, before a more general comparison is made highlighting the search for mutual benefits within advanced VCC.

To conclude, we find that there are stark differences between VCCs in the specific institutional arrangements and power relations within them. Advanced VCC demands closer farmer-buyer integration, and the value that is added through certification leads to an enhanced bargaining position for farmers in advanced VCC. We find that although VCC is positive for all farmers’ livelihood assets, the training and communication within advanced VCC creates much greater increases in social, human and natural capital. The links between financial and physical capital are less significant, although it is surprising that financial capital is reportedly higher. Those within advanced VCC seek to realise mutual benefits, and Armajaro have steadily increased the amount of certified cocoa they are able to purchase, whilst farmers have been able to improve their income, health and their livelihoods in general.
6. Cocoa farmers’ autonomy

This section discusses four key ways in which farmers claim autonomy: the autonomy of production, marketing, profit/risk and change. Each concept is further broken down to the barriers faced (directly and indirectly) and the ability to take opportunities as introduced in Chapter two. Comparisons between basic and advanced VCC will be made throughout to assess how farmers’ autonomy can be impacted.

6.1 Autonomy over production

Autonomy over production is the ability of households to take informed decisions on how they produce goods, and their ability to fulfil these decisions. Explicit constraints to this autonomy come from quality standards set by the government and the private sector, as well as national laws and agreements. Implicit constraints include a lack of knowledge on alternative farming methods that can produce higher yields, positively impact farmers’ health, or provide efficiency. They can also come from a lack of access to help support the implementation of agricultural practices, from a lack of technical expertise, or unavailability of equipment.

6.1.1 Farmers’ explicit constraints to autonomy over production

Farmers working within basic VCC can produce cocoa in any way, and are not given guidance by PBC. However, they must meet national standards dictated by Cocobod, or their cocoa will be rejected, impacting mainly the length of fermentation and drying of raw beans. This leaves farmers autonomous in their decisions to follow agricultural practices, choosing their own methods of pest control and fertilisation, as long as standards regarding fermentation and drying are met. Where regulations do exist, such as initiatives that tackle the use of child labour, monitoring within basic VCC is low, and without visits to farms, these cannot be effectively imposed upon farmers (Cocobod1).

Farmers within advanced VCC, however, have extra conditions they must satisfy, which are monitored by Armajaro and UTZ. Officially there are 58 UTZ standards that apply to farmers, 27 of which are mandatory from the beginning of certification. To become a certified farmer, and gain the price premium, farmers must employ the UTZ standards and sacrifice the agricultural practices banned by UTZ certification. Non-
compliance will result in three formal warnings before the price premium is withheld, until they have been retrained (Arm2).

For crops other than cocoa, there are no explicit constraints as to what may be grown. For farmers, this decision does depend heavily on market factors, discussed in 6.2, and is a key factor for farmers’ autonomy over risks and benefits, to be discussed in 6.3.

6.1.2 Farmer’s implicit constraints on autonomy over production

Farmers within basic VCC rely on local knowledge, and occasional input from external actors. However, through training in advanced VCC, farmers are shown new practices, and increase their understanding of pre-existing ones. Farmers can overcome the constraint of insufficient agricultural knowledge, and instead utilise the opportunity to improve agricultural knowledge, enhancing productivity and income. For example, all farmers know they should weed their farm, but it is only clear for those within advanced VCC that this is because weeds directly compete with cocoa trees for nutrients. All farmers know that shade is needed to protect young cocoa trees, and many use plantain trees until cocoa is mature. However, through certification farmers learn that cocoa trees produce longer if given shade trees throughout their lifespans. This changes farmers’ approach, and plantain’s short life span is no longer adequate. Instead, farmers can choose to grow indigenous tree species within their cocoa farm, which provide shade and meet other certification standards. By being given more choices and understanding of the rationale behind these, farmers within advanced VCC are able to make informed decisions about the practices they wish to follow and hence increase their autonomy over production.

Farmers, once given information, also need to be able to successfully implement/apply the choices they make. Within both types of VCC farmers can gain access to credit that they can use for agricultural practices, for example pesticides, or for livelihood choices, such as paying for school fees. With limited access to credit from other sources, VCC removes a financial barrier. This is also the case when buying companies provide fertilisers directly, or farming inputs such as cutlasses, giving farmers greater autonomy to fulfil their livelihood choices.
Within advanced VCC, farmers have access to further support to change their practices, with continued support from certification officers, and certification groups to facilitate discussion among farmers. This support lowers the risk of incorrectly implementing new practices, or failing to realise their full benefits. Farm visits allow farmers to ask specific questions to experts, and following training on health and safety can dramatically decrease the risks farmers face to their health. However this is only true for those who choose to follow certification standards. Within the advanced VCC farmers will not find support in implementing other than certification standards.

6.1.3 Summary

Autonomy over production can be limited by constraints in the form of quality standards that can result in cocoa being rejected put on farmers within both basic and advanced VCC. However there is a strong counter argument that through VCC farmers can overcome limited access to inputs. Further, within advanced VCC farmers’ increased knowledge and ability to implement this knowledge informs choices. By completing training on certification standards, farmers are given the rationale behind agricultural practices. They can then make the autonomous decision whether or not to follow that practice, based on the information they hold, fitting our definition of autonomy over production given in 6.1.
6.2. Autonomy over marketing

For the Ghanaian cocoa farmer, autonomy over marketing is the ability to enter/exit different markets; choose whom to sell to; and influence crop prices. The focus here will be on how VCC affects marketing within the cocoa value chain, but will also include alternative crops that farmers may produce. Explicit constraints for autonomy over cocoa marketing come through both Cocobod’s regulations and national laws. Implicit constraints include limited market development for alternative crops and farmers’ limited knowledge of alternative marketing strategies, particularly within basic VCC.

6.2.1 Farmer’s explicit constraints to autonomy over marketing

In Ghana, there are no explicit constraints on entry to, or exit from, markets. Farmers are fully autonomous in their decision to integrate into different markets, but must ensure that they are able to meet quality standards. Cocoa farmers are constrained in whom they can sell to, with only companies licensed by Cocobod able to legally buy cocoa, and all exports going through Cocobod. However, movement between buyers is not constrained and farmers are able to choose the most beneficial relationship available at any time, with key factors from the baseline survey presented in Figure 6.1. Within the cases studied, the high degree of explicit autonomy of marketing creates competition between buyers. This gives farmers power within VCC, explored further within autonomy over profit/risk (see 6.3). It must also be noted that the case studies selected were in areas with multiple buyers, which is not the case throughout Ghana: three farmers in the baseline survey (2.3%) reported having no choice in buyer, and proximity is a factor for many (see Figure 6.1).
For the price setting of cocoa, farmers’ autonomy faces high explicit barriers. Cocoa prices are decided centrally, with no effective representation of small-scale farmers (FP23; Arm2). Further, with buying companies limited in the profits they can make, there is no price differentiation, dissuading farmers from investing further in the quality of the beans they produce. Through advanced VCC, farmers have the option to add value through certification (UTZ1), offering a modest way to overcome the barrier of governmental price fixes. The price premium then turns constraints into an opportunity.

6.2.2 Farmer’s implicit constraints on autonomy over marketing

Price setting for other crops do not have any explicit constraints and rely on barter (FP21). However, rather than a feel of autonomy over marketing, farmers see this as a negative trait, involving the risk of being cheated (FA5) and facing dramatic price fluctuations (FG3). With farming being the main livelihood, some crops fall to a quarter of the normal price during times of abundance (PBC2). At times, farmers may sell their produce at a loss, and with food crops there can be times where prices rely on traders
finding a buyer before farmers are reimbursed (FA10). Traders are able to negotiate with a number of farmers and if markets are saturated, there is little farmers can do to improve the price, resulting in an implicit barrier despite there being explicit autonomy.

Limited market development of alternatives to cocoa can act as an implicit constraint. In the communities visited, farmers almost exclusively grew a combination of cocoa, oil palm and food crops, with other markets far less developed. For example, if cultivating rubber, produce must be transported out of town (FG2), which adds costs, especially when infrastructure is severely lacking. Farmers are constrained to only the crops that have accessible markets.

Farms’ awareness of alternative strategies is a limitation that constrains choices. This can come from underdeveloped, or non-existent, markets as previously given, but can also be from incomplete information of existing opportunities. Particularly for farmers working within basic VCC, many were not aware of how other buying companies operated, having never enquired about differences (FP3). For example, one farmer claimed that “There is also no company that says I’m buying my cocoa at a higher price than other companies” (FP25), in obvious ignorance over the bonus available for those that achieve UTZ certification with Armajaro in the same village. In contrast, within advanced VCC, where household livelihoods are seen as vital for sustainable sourcing of cocoa, diversification is actively promoted (ARM1; UTZ1).

**6.2.3 Summary**

In the cases analysed, farmers are autonomous in their decision on whom to sell to. In cocoa markets this creates competition between buying companies, and in other markets it means farmers can diversify. However diversification is constrained, with many potential markets remaining under-developed. The ability to set cocoa prices is explicitly constrained by Cocobod and the PPRC (see 4.1). Farmers are also implicitly constrained by prices within alternative markets, with buyers having many farmers to choose from when buying common produce.

**6.3. Autonomy over benefits/risks**

Autonomy of benefits and risks is how households are able to position themselves to protect and enhance their livelihoods. This is impacted by the households’ autonomy
over production and marketing, which can aid farmers in their ability to overcome constraints and position themselves in light of risks.

6.3.1 Farmer’s explicit constraints on autonomy over benefits/risks

The competition between buyers impacts autonomy over marketing, but also the ability to control risk, and claim benefits. Farmers know the ease of changing buyers, giving them power over buyers (FG1; FG2; FG3). In turn, buyers are under pressure to obtain cocoa stocks, and therefore seek to appease farmers to earn their trust. One illustration comes from farmers’ need for financial assistance, the most common reason for choosing a buyer (Figure 6.1). If a buyer is unwilling to grant credit, farmers will approach other buying companies in return for their future cocoa (FG3). Buyers face the risk of farmer default, but if credit is not offered they risk losing farmers to other buying companies (Arm1). Another example is the importance of prompt payment for cocoa, and if money is not instantly available farmers will often look to other buyers (FG1) resulting in buying companies making sure cash stocks are maintained (ARM1; PBC2). With marketing choice comes the ability to choose the most beneficial VCC for an individual farmer, increasing their autonomy over profit and risk.

In the case of advanced VCC, farmers have become certified and so are in control of higher value goods, differentiating their product from ‘standard’ Ghanaian cocoa. Armajaro have invested in bringing farmers up to certification standards, so there is more to lose from farmers dissenting to other buyers (Arm1). Farmers, on the other hand, are willing to forgo the bonus if they are in need of other benefits, such as instant cash or finance (FA18). A KPMG report (2011) estimated 30% of certified cocoa is sold as non-certified. With high-value cocoa, farmers within advanced VCC have a stronger bargaining position, further increasing their ability to position themselves optimally.
Cocoa incomes predominantly come from an annual bulk harvest, resulting in farmers struggling during the off-season. However, without explicit constraints on entering alternative markets, farmers diversify their crops to overcome risks and take advantage of distinct benefits. Diversification usually involved farmers also growing food crops (71.3%) and oil palm (73%) (Baseline Survey). Food crops were bought to ensure food security even when a family had no money, and to provide some supplementary income (FG2). Oil palm was grown as a cash crop that could provide some income on a monthly basis, and was referred to as ‘pocket money’, being able to support income throughout the year (FG2). Farmers’ ability to position themselves in each of these markets allows them to claim autonomy over risk and benefits.

Farmers do face risks, and must meet national minimum standards, and if these are not met farmers have no use for their cocoa. In the same way, farmers are reliant upon the producer price, and in both of these respects, the regulation of cocoa constrains the ability of farmers to take different positions within cocoa markets. However from the farmers’ perspective, the regulation of cocoa markets is seen as a positive. By having access to a market where the price is known in advance, and where demand is guaranteed for a certain quality, farmers can be certain about a share of their income (FA12). Farmers report very few risks within cocoa markets when compared to both food crops and oil palm, mainly due to the price setting but also because of the longevity of cocoa tree production (FP27). Although autonomy is lowered within cocoa markets, for farmers’ livelihoods the regulated cocoa markets in fact increase autonomy of risk and benefits, providing security that is not available within other markets.

6.3.2 Farmer’s implicit constraints to autonomy over benefit/risks

Diversification faces implicit constraints from market access, discussed in 6.2.2. With only two main cash crops common in the research location, oil palm and cocoa, farmers’ ability to reposition themselves through diversification are constrained to existing markets. Farmers can also face constraints within these markets. No farmer, when asked, thought it would be possible to survive on food crops alone. This was mainly due to the fall of crop prices during times of abundance (FG3), but also the lack of storage facilities (FG2). Food crops are easily spoiled by bad weather (FG1), perish easily (PBC2)
and farmers report having to let food spoil before it is even harvested, if they know there will not be a buyer for their goods (FA19; FP29).

There are, however, areas to add value with food crops and overcome these constraints. Farmers can make fried plantain chips; produce garri from cassava; or drying maize for later sale (Arm2; FA19). Price is again subject to supply levels, but indicates some level of autonomy within food markets. Oil palm markets also suffered from price fluctuations, but to a lesser degree. Producers also benefitted from a large business presence, GOPDC (4.4.2), which competes with local buyers by offering more consistent prices, often higher than those offered on local markets. Whilst it was possible for households to process their own palm oil, few farmers actually reported this during interviews, suggesting it is not a common practice.

A defining factor of both profit and risk is the quality of land a farmer owns. With poor or diminishing quality, a farmers’ ability to invoke profits and avoid risks is dramatically reduced over time. However here there is a clear different in the nature of VCC. With increases in training and support on good agricultural practices, as well as the focus that Armajaro put on sustainability, those within the advanced VCC studied have increased their ability to maintain their income from cocoa over time. Many within basic VCC have limited knowledge of the benefits or risks of the practices they currently follow. A standout example already used is the use of DDT by one farmer. Farmers wishing to be certified are educated on sustainable practices, for example training is given on approved chemicals, removal of empty agro-chemical and the importance of biodiversity. This increases farmers' autonomy over the long-term risks and benefits, overcoming the common constraint of insufficient knowledge.

Farmers selling cocoa are also constrained in their ability to leave the market in the event of less favourable market conditions. Cocoa farms are long-term investments, and the significant cost in uprooting a mature cocoa farm is a large barrier to farmers considering leaving the market. Additionally, there is no way for farmers to process their own cocoa, and farmers are not in a financial position to be able to withhold cocoa until market conditions improve. This leaves cocoa farmers as price takers in the short term with only limited autonomy in the medium term (FP7).

6.3.3 Summary

Cocoa farmers’ autonomy over benefit and risk is linked to their autonomy of both production and marketing, using these as tools to optimally position themselves in
maintaining livelihoods over time. We see that autonomy of benefit and risk is enhanced through competition between buying companies, as households gain bargaining power. This is more strongly felt within advanced VCC for farmers producing certified cocoa. Diversification is a key method for farmers looking to avoid risks and smooth consumption, but feasible options are limited. Again we see training as a way of overcoming barriers to knowledge, this time in providing autonomy over long-term benefits and risks by targeting sustainability.

6.4. Autonomy over change

Autonomy over change is how farmers are able to create change for themselves, either as a household, through small groups or via nationwide movements. Explicit constraints are not obvious, but can be seen in farmers’ abilities to officially lobby other actors, with the focus on the government and buying companies. The implicit, then, is concerned more with power of individual households to change their immediate surroundings using informal methods.

6.4.1 Farmer’s explicit constraints to creating change

Explicitly, small-scale cocoa farmers in Ghana seem to have a healthy amount of representation at the national level. Each farmer is automatically signed up to a farmers union. This union is present in key decision-making processes, including the PPRC, responsible for setting the producer price for cocoa. However, in reality, small-scale farmers cannot create change through this union. As discussed, representation is very limited, and many farmers are not even aware that they are members. Cocobod performs some explicit monitoring when completing research, and record farmers views. However these are not regular occurrences, and Cocobod relies mainly on secondary sources for information on farmers’ livelihoods (Cocobod2).

For explicit lobbying of buying companies, there are no restrictions for farmers and theoretically any farmer could form an organisation. However, for reasons discussed later in implicit barriers, this does not occur. Farmers working within advanced VCC do benefit from regular, formal contact. Having increased interaction within certification groups allows farmers to share concerns and highlights those that are common. Regular visits from the commercial officer will highlight problems to buyers and gives farmers regular points of contact. UTZ also monitor both farmers’ and Armajaro’s progress with standards, which are regularly updated to reflect changing priorities and concerns from both
consumers and producers. Each of these tackles constraints farmers face from a lack of social capital.

Farming communities can also be the subject of development projects, implemented by buying companies or NGOs to improve local livelihoods. Within the research it emerged that Armajaro was implementing a water project, in which boreholes would be dug for communities to gain access to clean and safe water. Within this, a formal needs assessment had been completed, and farmer participation came in the form of detailing the water provision that already existed to ascertain where the greatest need for clean water was. Whilst this is not co-planning, it does incorporate a farmer perspective and ensures projects are not blindly forced upon communities, addressing the lack of farmer input that can constrain the effectiveness of such projects.

6.4.2 Farmer’s implicit constraints to creating change

For farmers to influence buying companies there is the ability to interact directly with representatives whenever cocoa is sold. However actual change is rare, and farmers themselves do not believe they have influence (FG2). We can, however, see that there are fewer constraints to exerting influence within advanced VCC. Despite being able to offer premiums for certified cocoa, buyers are wary of losing their farmers, and identify the importance of listening to farmers’ problems and reacting to changing market conditions (for example a lucrative offer from a rival buying company) (Arm1).

The ability for small-scale farmers to influence other chain actors is severely limited by their lack of social capital, discussed in Chapter five, but also cultural constraints, briefly introduced in Chapter 4. As discussed, the culture within Ghana is one that accepts hierarchical relationships. This acts as a constraint to small-scale actors, for example when faced with the earlier scenario of having a development project, many respondents were happy to accept what was given even if other needs were greater, accepting it as the company’s choice because they had the money to spend (FG3). Farmers accept that their complaints to purchasing clerks do not get passed on, assuming it is the person above that ‘doesn’t mind’ them (FP2). Whilst farmers were clear that they wanted extra support, or how an increase in the producer price would improve their livelihoods, this was not followed by action, showing the constraints upon farmers’ implicit autonomy to create change.

Communities of farmers put high value on cocoa, and this can also restrict the

“For a cocoa yielding its maximum, no farmer will cut it and decide to grow another crop. If you dare try the farmers won’t be happy with you at all”

Focus group 3
ability to make changes. During focus groups, we had discussions on the ability of farmers to replace their cocoa farms with alternatives. However each time this was met with resistance. Previous examples of failed ventures are given, with those that had abandoned cocoa ‘disgraced’ (FG3) when compared to those that kept faith with cocoa knowing that it would always have a buyer, even if the price decreased (FG2).

This conservative attitude and respect for tradition also leads farmers to resist change in the way they grow their cocoa, especially in older farmers (Arm2). This is a challenge for both buying companies and the government, who wish to promote a business attitude and encourage enterprise (Arm2; PBC1; Cocobod1). Farmers give high importance to traditional methods, and this can mean attitudes are slow to change (Arm2). Particularly within advanced VCC, where training is fundamental to achieving certification, farmers have to see benefits. This has been addressed by ensuring certification is achieved in gradual steps, first ensuring farmers consistently follow practices they already know that are likely to increase yields (Arm2). Once farmers trust the methods preached within advanced VCC, they are willing to follow further standards (FA8).

“Of course, they are doing what they are doing and they are getting their result. But it is up to you to show them in a participatory way that they can do much better than they are doing, and that takes time.”
UTZ Field Officer

6.4.3 Conclusion

For farmers’ autonomy to create change, we see a lack of formal avenues especially within basic VCC. However this is in part a result of common attitudes amongst communities, highlighted from Chapter four as power distance, long-term orientation, and uncertainty avoidance. To some extent, we see farmers’ attitudes towards change and their confidence in challenging authority increase within advanced VCC, as they are encouraged to collaborate with other farmers and adopt new agricultural practices. However implicit constraints still dominate, despite new opportunities to overcome them emerging through advanced VCC.

6.5 Conclusion

Having tackled the four aspects of autonomy separately we have found autonomy of production is limited by national standards, but that farmers are free in other regards. Within advanced VCC there are limitations through certification standards, but also opportunities through human capital increases. Autonomy of marketing is again limited at
the national level, with minimum prices and official licenses needed for buyers. However where there are multiple buyers there is high competition and this is enhanced within advanced VCC, where value is added to cocoa. Autonomy of benefits/risks is shown within farmers’ use of diversification and bargaining to overcome risks to their livelihoods, and make the most of benefits from different crops. Limits to diversification and bargaining come from lack of market development and social capital respectively. Autonomy of change has some existing processes for farmers to create change, but these are not effective. A lack of social capital constrains farmers, but this is underpinned by cultural dimensions, with farmers showing high risk-aversion and a strong preference for the continuation of tradition.

These findings all add to the discussion of how Ghanaian cocoa farmers are able to claim autonomy within a global value chain. However the core aspect is that participating in the cocoa market and further advanced VCC are clear choices. Farmers readily give up autonomy over production in order to produce certified beans. But in the process, they gain access to implicit sources of autonomy over production, whilst increasing their bargaining position in the chain and the profit they receive from cocoa farming. The implication hereof for the food sovereignty debate will be discussed in the next chapter.

Photograph 6.2 – Plantain being grown to protect new cocoa trees
7. Conclusions

This final chapter will summaries the answers the research questions directing this research. A theoretical reflection is offered, primarily surrounding the role of trade in food sovereignty discourse. This leads to suggestions for further research and finally implications from the findings for future practice are discussed practice.

7.1 Synthesis of the findings

The first research question addressed the characteristics of the VCCs studied, in terms of actors and their interests, institutional arrangements, and activities. In Chapter four, the actors and their interests were given in detail, using both secondary literature and field observations. Cocobod, PBC and Armajaro were analysed as transforming structures within the SLA, whilst farmer characteristics were outlined using previous studies and data collected from the baseline survey.

Cocobod has a dominating presence at the national level, controlling exports, national prices and quality standards, whilst being backed by the government and national law. Through various divisions, Cocobod promotes cocoa production with the aim of exporting premium cocoa beans. Within Ghana Cocobod holds significant power, but does rely on private buying companies to collect cocoa of the required quality from thousands of small-scale cocoa farmers. Cocobod maintains the ability to issue and revoke licenses to buyers, and sanctions those who violate conditions.

Buying companies employing different strategies to source cocoa beans and this study focussed on the differences between PBC and Armajaro. As a former division of Cocobod and monopoly holder, PBC has a strong reputation and unique position within communities. Its interest is in buying standard cocoa, and it has a basic relationship with farmers in order to do this. Farmers respect the company for its longevity in the cocoa sector. Armajaro, on the other hand, is owned internationally. It has been following the UTZ certification programme for 4 years, requiring it to monitor both farmers and its own practices. Certification results in a price premium, some of which is passed to farmers. Farmers working with Armajaro report a mutually beneficial relationship, and value the bonus they get.

Farmers’ primary concerns are to earn income and ensure food security, by growing a range of crops. These are predominantly cocoa, oil palm and food crops. These different markets offer different benefits, and cocoa is the most formalised, where farmers know in advance the required quality, and price they will receive. This reliability is one of
the benefits farmers see in cocoa markets. A number of buyers were present in the study areas, and farmers could use this to choose between the one that best suited their needs. Reasons for choosing a buyer were often location or access to finance. However during interviews it emerged that trust was a big factor for those selling within basic VCC, and the bonus and mutual benefits was a prime motivator for those within advanced VCC.

As regards institutional arrangements, a distinction was made between basic and advanced VCC. Clear differences were apparent in the level of integration between the two, and this is linked to the level of monitoring that must take place for quality standards to be met. In particular, it was concluded that advanced VCC were more concerned with taking advantage of mutual benefits through informing farmers’ decisions.

The second research question explored the impact of basic and advanced VCC on livelihood assets, particularly human and social capital. It was found that, as expected, advanced VCC has a bigger impact on human capital. Compared to basic VCC, where farmers rely on external actors to gain knowledge, training is required within advanced VCC to meet certification standards. Justification of practices within training meant farmers were informed of why they completed agricultural practices, rather than just how to do them. Social capital was impacted less significantly, but monitoring processes by Armajaro, and certification groups of certified farmers, gave increased opportunity for social capital to form. One surprising finding was that financial capital was reported to be higher in basic VCC. We hypothesise this is due to the experience PBC has within cocoa markets, meaning relationships are built on deep-rooted trust with default less likely. In general, farmers report greater benefits from advanced VCC.

The third sub-question aimed to discover the limitations upon farmers claiming autonomy. These were split into explicit and implicit constraints, and were present within both VCCs and alternative markets. Explicit constraints were most common within cocoa markets, from the heavy regulation in place from Cocobod. However implicit barriers were numerous in alternative markets, with farmers still unable to influence prices, and even found their exposure to risk had increased. Between VCCs, farmers faced more explicit constraints in advanced VCC, with additional certification standards required for the payment of the premium. However, a crucial finding was that implicitly, farmers within advanced VCC were able to overcome many of the barriers observed in basic VCC. With the ability to revert back to selling standard cocoa, farmers within advanced VCC had made an autonomous and reversible decision to follow certification standards to add value, but had gained the opportunity to overcome many implicit constraints to their autonomy in the process.
The fourth research question, concerned with the implications of the study for food sovereignty, will be addressed in the following section (7.2). We will see two main themes in relation to the Ghanaian cocoa farmers’ context. The first is that farmers gain vital income from integration into the global market for cocoa. The second theme is that, through VCCs that look to realise mutual benefits, increased integration within global markets can positively impact farmers’ assets and autonomy.

How do differences in value chain collaborations (VCCs) between private companies and small-scale cocoa farmers in Eastern Ghana affect households’ autonomy over their livelihoods?

In conclusion, and in answer to the main research question, this thesis finds that a higher amount of integration, with the aim of realising mutual benefits, leads to both improved livelihoods for farmers and increased autonomy over these livelihoods. It should be clear that within this answer, there are many factors that either work in tandem, or oppose one another. However, throughout the research and subsequent analysis it has been clear that cocoa is essential to small-scale farmers and that their power to improve their livelihoods is greatly enhanced by participation in advanced VCC.

7.2 Theoretical reflection

Food sovereignty argues that farmers should be able to access sufficiently nutritious food, have autonomy over access to this food and that this access should be sustainable. Cocoa production seems to go against many of the standards that lead from these principles, seemingly placing constraints on farmers’ autonomy. Farmers are only able to sell to licensed buying-companies, and must meet national minimum standards, imposed by the government, at a non-negotiable price. Cocoa cannot be processed by households, and has no value to farmers unless sold, making it a pure cash crop. This appears to leave cocoa farmers at the mercy of other actors, and so suggests that alternatives are needed for them to achieve food sovereignty. However, as previously argued, cash crop markets cannot be ignored by food sovereignty discourse, and can contribute to autonomy in other ways. As has been stressed throughout this thesis, these aspects must be seen in context, and it is within the Ghanaian context that we see the importance of global value chains for small-scale cocoa farmers.

Food sovereignty places large importance upon local markets for local producers, but the reality is that, in the study area, local markets are limited and cannot meet
households' needs. Local goods can be processed to add value, but prices remain unstable during times of abundance. Farmers cannot rely solely on food crops, and price fluctuations and wastage mean local markets carry large risks. Cocoa, as an internationally demanded cash crop, is different. With a constant price and regulated buyers, cocoa is a reliable source of income for households, providing support for their livelihoods. As shown in Figure 6.2, without cocoa and inclusion into world markets, farmers would find it particularly difficult to afford their children’s education, achieve food security and provide adequate shelter. In line with recent studies (Kerssen, 2015; Agarwal, 2014), this thesis highlights the importance of world trade for small-scale farmers and the importance of finding ways to integrate it into food sovereignty (Burnett & Murphy, 2014).

**Top item of expenditure**

Figure 7.1 Top item of expenditure as proportion of respondents (N=144) declaring it as such (Baseline Survey)

Diversification signals that farmers are not tied into cocoa markets alone, however farmers choice to include cocoa as a major part of their diversification strategy highlights its important role. Advanced VCC further enhances this autonomy, with farmers willingly undertaking certification practices in order to add value to their cocoa, whilst maintaining the option to abandon certification or cocoa altogether. Our specific focus on autonomy has lead to recognition that farmers have no control over price or quality requirements in the national market. However the presence of the market for small-scale farmers, who can
depend on the income it generates, is unique. Farmers who praise cocoa markets for improving their livelihoods act to further highlight the importance of cocoa. By focussing on the lack of explicit autonomy within cash crop markets, food sovereignty risks ignoring the benefits that international markets can have. Farmers can increase their ability to diversify, selling to both international markets and local markets; and in turn the ability to claim autonomy of risks and benefits through this diversification.

Food sovereignty’s third aspect is that of sustainability, with traditional knowledge that relies on mixed cropping and does not rely upon modern agro-chemicals (Altieri et al., 2012). This in turn preserves natural ecosystems for crops to thrive (Altieri, 2009). However this is exactly the knowledge that is (re)gained by certification. Increased integration with the chain, through advanced VCC, improves farmers’ knowledge of sustainable practices that will increase yield, promote biodiversity and maintain soil fertility. Many farmers are not aware of the effects of the agricultural practices that they follow on either themselves, or their land, resulting in implicit constraints. However, through advanced VCC, farmers and buying companies work towards sustainably produced cocoa that will provide income for both parties over a long period of time, training farmers along the way and removing lack of education as a constraint. In addition, the increased ability to communicate aids farmers to implement changes, whether they are looking for help from fellow farmers, organising for their crops to be sprayed from within their local spraying group, or making local issues clear to certification officers. Food sovereignty cannot blindly push for farmers to rely predominantly on traditional knowledge (Altieri et al., 2012). If agricultural knowledge from external sources can increase yields and improve livelihoods for farmers, whilst boosting private business interests, it is clear that integration with international markets can bring mutual benefits.

The success of advanced VCC in taking advantage of mutual benefits can be linked to Porter & Kramer’s (2011) concept of ‘Creating Shared Value’. This thesis has detailed the success of advanced VCC in impacting farmers’ assets as well as simply increasing their yields, and this success can be seen through a shared value perspective as successfully incorporating societal considerations where purely economic needs usually dominate. This has also been coined as VCC ‘beyond the chain’ (Ros-Tonen et al., in press), and has been shown in the improvements in sustainability, farmer livelihoods and productivity within advanced VCC.

Within these developments lies the potential to integrate world markets into food sovereignty discourse. This thesis has focussed upon autonomy and a recurring theme in the analysis was that of informed decisions. These give households the ability to take make
changes in respect to their production, marketing and risk/benefit exposure. Instead of failing to see beyond the local/global market dichotomy, food sovereignty should focus on the conditions that characterise markets. Does the market expand livelihood choices? Is there enough information for participation to be based on informed decisions? How easy is it for households to change their market orientation in light of changes (market entrance/exit)? By going further into how autonomy is affected by different market positions, food sovereignty can develop in a way that in fact encourages international trade, where terms are conducive to the three core principles of food sovereignty.

However there are limitations to these theories. The inclusiveness of VCCs is questioned, with corporations ignoring the hardest to reach, who are often also the most marginalised, concentrating on farmers who will show the biggest improvements from investments (Crane et al., 2014). From the respondents interviewed, it is clear this may also be the case for certification. Respondents working with basic VCC had a roughly even split between male and female, however, within advanced VCC there was only one female. In addition, there were gaps in age and education, with Armajaro attracting younger farmers with higher education on average. Whilst the differences were not drastic, and with non-representative samples, it indicates that there may be a profile for farmers that are able to achieve certification. Whilst it would be speculation to offer specific reasons for this, cultural aspects are likely to have an impact, such as the predominant role men play as the head of house, along with the risk aversion of different sections of the population, with those older usually less likely to take risks.

Another limitation to advanced VCCs is that, through certification, higher standards become the new norm. In previous cases it has been observed that higher standards, initially earning a premium, instead became requirements for accessing markets (Quaedvlieg et al., 2014). Particularly when certified markets are not well developed, buyers simply adapt to the new standards and those not able to meet requirements can find themselves locked out of international markets (Quaedvlieg et al., 2014). The threat of this to cocoa markets is unclear. Both certified and conventional cocoa beans have strong market bases, maintaining demands in both markets. However the long-term situation could follow a similar pattern. Although not directly observed, during interviews it was a concern that some buying companies were seeking to become certified without first organising a buyer willing to pay the premium, and so were unable to offer farmers additional money for becoming certified (UTZ1). Further, seeing the success of certification programmes, Cocobod officials mention the possibility of creating their own
certification scheme, “Ghana Certified”\(^\text{11}\), and it is easy to see how this would require all farmers to improve their methods of production, eroding the price premium earned in the process. However conclusions cannot be drawn from this snapshot study, and would require a longitudinal study.

### 7.3 Suggestions for future research

Whilst the unique conditions of the cocoa market in Ghana mean that it has been the subject of much research, this has mainly been focussed on specifically the cocoa value chain, and has not necessarily taken a view of the surrounding context or impacts upon farmers’ livelihoods. This study has used existing literature and data driven from a farmer perspective to look beyond the value chain for effects on farmer livelihoods and autonomy. There are many further lines of enquiry that could help explain small-scale farmers’ livelihoods within global VCC, the role autonomy can play in farmers’ livelihoods, and how food sovereignty can address concerns of neglecting small-scale farmers who rely, often by choice, upon global cash-crop markets.

This snapshot study does not show the dynamics of livelihood trajectories, neglecting the effects of advanced VCC on farmers over time. Specifically, if continuing to focus on farmers’ autonomy, studying livelihood trajectories can show how capabilities change over time, in relation to their level of VCC; show the processes of change, including the bargaining and power relations between actors; and give an opportunity to successfully employ different perspectives, adding to the contextual understanding within which changes take place (Murray 2001). Further, it will help to understand and evaluate some of the concerns highlighted in the theoretical reflection (7.2). This thesis has compared levels of integration into the world market as basic and advanced VCC, leading to an analysis of the impacts on both livelihood assets and autonomy. However, developing a holistic picture using a longitudinal study would allow the researcher to assess changes in both of these, and how they are affected by farmers’ participation in either basic or advanced VCC.

This thesis has highlighted food sovereignty critiques, and argues for a better understanding of how food sovereignty fits into specific contexts before it can be realised as a goal within changing global contexts (Alonso-Fradejas et al., 2015). International trade cannot be ignored, and recent theoretical contributions are increasingly arguing for its integration into food sovereignty discourse (e.g. Burnett & Murphy, 2014; Bacon, 2015;

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\(^{11}\) This was discussed during an interview, but does not represent an official policy or ambition.
Ros-Tonen et al., in press). Case studies are vital to this work, and help focus attention on situations on the ground. These studies should increasingly look into how international trade is currently used as a tool for achieving autonomy and food sovereignty across different contexts. By evaluating three distinct aspects of food sovereignty: food availability; autonomy over food sources; and sustainability of production, researchers have distinct aspects of food sovereignty that can be assessed individually. By identifying how these are interlinked, which aspect is most important to small-scale farmers, and how integration into international markets impacts them, there is a greater chance of successfully combining trade with food sovereignty.

A third area of future research that would add value would delve further into the autonomy of farmers, and how this can be assessed. This thesis has conceptualised autonomy over production; over marketing; over risks/benefits and to create change. This has led to an analysis that focuses upon explicit and implicit constraints to autonomy, and it is likely that this approach would benefit from being applied to other contexts to assess its relevance as an approach to conceptualising autonomy. Through further work, autonomy can be compared across different contexts using a common framework. If achieved, the role of autonomy can be robustly analysed for its impacts on farmers' livelihoods and on food sovereignty.

7.4 Recommendations for policy and practice

Having reflected on the implications for food sovereignty discourse, it is clear that the concept needs adapting before being applied to small-scale cocoa farmers in Ghana. In this sense, the research fits well within, and adds to, the current debate on whether market participation fits into the food sovereignty movement. Previous studies have highlighted the gap in food sovereignty discourse made by ignoring the importance of international trade for the livelihoods of small-scale farmers that produce for export markets (Burnett & Murphy, 2014; Ros-Tonen et al., in press). The ideological position taken by radical food sovereignty advocates involves the risk that the reality of farmers’ preferences is neglected (Vorley et al., 2012) and the findings of this thesis show farmers’ preference towards integration in international cocoa markets. With a focus on autonomy over livelihoods as a whole, rather than concentrating on one value chain at a time, food sovereignty can recognise that global markets offer unique benefits. By using markets in an informed manner, farmers can ensure household food security, gain expertise on sustainable farming from external actors; and increase their food sovereignty.
The success of advanced VCC described in this thesis is also due to its design and implementation. Similar projects have come into trouble, despite having many of the same core concerns over sustainability and farmer livelihoods (Quaedvlieg et al., 2014). The priorities of farmers and other chain actors can provide a framework for creating VCCs that are inclusive of farmers’ needs, are economically viable, and promote household livelihoods and autonomy. The first principle is that benefits for farmers should have a long-term goal, recognising that sustainability of agricultural produce is enhanced when farmers lead good livelihoods. Through advanced VCC, farmers accrued livelihood assets that cannot be taken away, for example through education of sustainable farming practices, and can benefit farmers far beyond earning a price premium. The second principle revolves around training, fundamental for any advanced VCC that tries to modify farming practices. To increase farmers’ autonomy, training should be aimed at informing farmers’ decisions with accurate and accessible information. Seen in this study was farmers’ acceptance of practices when they could understand the rationale behind them, and this also led to dissemination among other farmers. A third principle relates to VCC governance, where minimum rights for farmers should be clearly stated and enforced. This is aided by encouraging competition between buyers and allowing free movement of farmers between these buyers. If farmers suspect cheating they are able to move to other buying companies, meanings farmers’ autonomy is the main tool used to ensure buyers compliance.
8. Bibliography


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Accessed on 28/05/2015.


Accessed: 13/05/2015.
Accessed: 28/05/2015.

Accessed: 21/06/2015.


## 9. Appendices

*Appendix 1 – Operationalisation table*

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<td>Ability to influence price</td>
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| Autonomy of profit/risk ["power to" (negotiate profits and risk")] | Power over benefits | Farmers’ influence over benefits within VC  
   Ability to gain benefit from alternative markets  
   Ability to add value |
| --- | --- | --- |
| Power over risks | Farmers’ influence over their share of risks  
   Ability to diversify against risks |
| Autonomy of creating change ["power from within"]  
External Autonomy | Livelihood change | Knowledge of alternative strategies  
   Attitude towards new strategies  
   Personal limitations to changing personal strategies  
   Livelihood needs  
   Outcome of previous livelihood needs |
| Local change | Local needs  
   Outcome of previous local needs  
   Mechanisms for influencing change |
| National change | National needs  
   Outcome of previous national needs  
   Mechanisms for influencing change |
Appendix 2 – List of villages and locations

- Ofoase – 9 respondents
- Ayirebi – 7 respondents
- Chia – 10 respondents
- Akokoaso – 4 respondents
## Appendix 3 – List of interview/focus group respondents

PBC Farmer Interviewees (n=15)

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Armajaro Farmer Interviewees (n=15)

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Other Chain Actors (n=7)
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Focus Groups

All attendees were invited from the interviews, and were also attended by the local buyer.

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