Left Behind:

Implications of Voluntary Standards for Local Producers in the Pineapple Value Chain in Ghana.

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List of Acronyms

ACP African Caribbean Pacific

AfCFTA African Continental Free Trade Agreement

EU European Union

FAO Food and Agriculture Organisation of the United Nations

FBO Farmer-based Organisation

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

Global GAP Good Agricultural Practices standard

GSA Ghana Standards Authority

GVC Global Value Chains

IAD Institutional Analysis and Design framework

ILO International Labour Organisation
 MoFA Ministry of Food and Agriculture
 NGO Non-Governmental Organisation
 SPSS Sanitary and Phytosanitary Standards

UNFSS United Nations Forum on Sustainability Standards

WTO World Trade Organisation

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Abstract

Research on the voluntary standards within global production networks shows a divergence between the argument that voluntary standards can effect positive economic and social change for local producers and the argument that they are a neoliberal tool that furthers the interests of powerful corporate actors. This study proceeds with an empirical examination to clarify the particular implications of voluntary standards for local producers within the certified pineapple value chain in Ghana. The study undertakes an investigation of local producers' relationship with the governance structure(s) present, the position of the voluntary standards therein, the institutional mechanism(s) that enable or hinder value chain development, and the implications of these for local producers. Literature reviewed covered extant discourse on the subject, as well as an integration of the Global Value Chain Governance and the Institutional Analysis and Design frameworks. The research adopts a qualitative research technique and employs semi-structured interviews for primary data. It leverages insights from leading actors to conduct an empirical analysis and present credible insights. The research findings reveal that for the certified pineapple value chain, voluntary standards potentially effect positive outcomes for local producers. However, they are currently embedded within a captive governance system, characterized by insufficient market access, presence of an institutional void; restricted economic upgrading and a deficient social upgrading mechanism.

Relevance to Development Studies

This research will contribute to the academic body of knowledge by combining existing theories and empirical data to arrive at narratives that accurately describe the nuances and complexities of voluntary standards in Ghana's pineapple sector. The pineapple sector is the most developed horticultural sector in Ghana, and there is a sustained interest in voluntary standards in the sector. However, research and communication around voluntary standards have presented universal epistemologies, thereby creating knowledge and action asymmetry for local contexts. This research will expose any demerits of universal normative assumptions to support the establishment of more case-specific research. This study will investigate which theories hold and are relevant to the case of Ghana.

Keywords

Voluntary Standards, Ghana, Pineapple Sector, Global Value Chain Governance, Institutional Analysis, Local producers

Chapter 1 Introduction

1.1 Background

Trade in agricultural goods and services has seen massive structural and numeric expansion. The consequent development of complex supply and value chains has compelled the move to organise; leading to the introduction of a growing set of transnational regulations and standards which affect the production, trade, and consumption of agricultural commodities (Byerlee and Rueda, 2015). With the establishment of the World Trade Organisation (WTO) twenty-five years ago, trade standardisation became a critical mandate of the organisation. The WTO introduced two significant agreements to guide food safety, and animal and plant health and safety. Member countries were then obligated to apply standards while simultaneously avoiding "protectionism in disguise" (World Trade Organisation n.d.). With the introduction of the Sanitary and Phytosanitary Measures Agreement (SPS Agreement) by the WTO, the basic rules of standardisation were set; and member countries assumed the responsibility of establishing their standards with regards to the SPS within their contexts. These were "applied only to the extent necessary to protect human, animal or plant life or health...and should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail" (World Trade Organisation n.d.). For instance, in Ghana, local pineapple producers must meet the SPS requirements to participate in international trade. While these agreements constituted the basic guidelines to standards conformity, member countries were also at liberty to employ higher measures after having assessed appropriate risks, so long as the process is consistent, not arbitrary. Since these agreements offered member countries the liberty to adopt varying national standards and inspection/auditing methods for validating product quality, voluntary standards emerged as the singular systematised framework for use by various countries across specific product categories.

According to the Loconto (2013:1), voluntary standards are "rules, guidelines or characteristics about a product or a process. They are not mandatory regulations, but are used voluntarily by producers, processors, retailers, and consumers". Established by collaboration between lead industry groups, there are concerns about the voluntarity of voluntary standards. Research on the role of voluntary standards has raised a heightened tension between the idea that voluntary standards hold the capacity to effect structural change for sustainable development and the argument that they act as a barrier to

¹ The Ghana Standards Authority (GSA) has a mandate to ensure strict adherence to SPS regulations.

profitable international trade, especially for local producers in developing economies (United Nations Forum on Sustainability Standards, n.d.). There are over four hundred voluntary standards globally, with many those within the global agricultural sector. For many agricultural producers in developing economies, voluntary standards may hold the key to economic development. Simultaneously, however, the general nature of these standards, their implementation, and the interests represented may create challenges for those actors. It has become necessary then, to understand the more context-specific nature of voluntary standards for local producers.

Voluntary standards have spread unevenly, being led by 3rd party certification bodies and industry associations and shape the strategic options available to local producers. Voluntary standards have become the "predominant mechanism by which global agricultural production and trade are governed" (Challies 2013:175). However, producers in some regions are faced with adoption and implementation challenges, thereby creating a system of unequal international trade opportunities for such producers. There is not much case-specific understanding and research of this unequal distribution of standards. This research aims to conduct an empirical investigation into the context of voluntary standards within the pineapple value chain in Ghana and the implications as experienced by local producers.

Pineapple is one of the major export commodities of the Ghanaian economy and the country's most developed horticultural sector. This fruit is consumed in both the international and local markets. Ghana falls within the fruit's top five exporters within the African Caribbean Pacific (APC) network of fruit and vegetable exporters, and the second-largest pineapple exporter to the European Union (EU). Since the 1980s, there has been significant growth in the country's export of the fruit. This development of the pineapple was predominantly nursed by smallholder farmers in an era where the market elsewhere was saturated by large scale producers. On the back of certain state investments, the pineapple export sector boomed, moving from US\$1.8 million in 1980 to US\$26.8 million in 1998, signifying a 14-fold growth. With this feat, Ghana joined Cote d'Ivoire and Costa Rica as the world's leading producers and exporters of pineapple (Danielou and Ravry, 2005); this signified a nation en route to dominance at the world stage.

1.2 Research problem

From the mid-2000s, the global pineapple export scene witnessed a general swing in preferred varieties from the *Smooth Cayenne* variety - predominant in Ghana, growing well in the sub climate, previously

preferred globally – to the more recent *MD2* variety. The MD2 variety, a result of research and development investments by the world's largest pineapple producers, Del Monte and Dole, has become the most preferred variety in the global market (Fold and Gough 2008). For local producers in Ghana, this brought in its wake extensive challenges. Until this time, smallholder producers in Ghana led pineapple production in a non-traditional export chain (Takane, 2004). Following the MD2 takeover and rise in unexpected global competition led by large retailers (Konefal et al., 2005), production and export have increasingly transferred from smallholders to better-financed commercial farms with investments for the MD2 variety.

Notable to this change in market preference was the rise of transnational market governance in the form of voluntary standards. Literature abounds about voluntary standards systems, governance mechanisms, and how they shape and are shaped by market forces. Gibbon and Ponte (2005) assert that while voluntary standards are lifting some producers into the global economy by the nature of their central processes, other producers are being marginalised. This assertion is supported by Gereffi et al. (2010:2) when they stress that voluntary standards shape the strategic options available to local producers, who are faced with one of three choices "upgrading, downgrading, or exit". With the expectations of standards systems, coupled with the new variety's required investments, local producers struggle to compete in the international export market, dominated by one type of voluntary standard or the other.

Although voluntary standards potentially possess a transformative capacity, there is a dislocation of the centre of production in the agriculture sectors in most developing countries where these standards are primarily adopted. The nature of developments in value chains has been criticised by scholars such as Huangand Reardon (2008), who contend that standards development processes are restructuring and restricting farm sector processes. This form of restructuring is argued to lead to value chains becoming shorter, thinner, and in the case of the pineapple value chain in Ghana, less local, where "fewer and larger players survive, and greater vertical integration becomes the rule" (Gibbon et al., 2010:10). These contestations lead smallholder farmers to adjust by exiting the chains or becoming dependent on more prominent producers for survival.

More often than broadly admitted, the Global Value Chain (GVC) governance systems surrounding standards fail to incorporate the political participation of local producers in developing economies; however, without empirical data, this assertion of exclusion of local farmers in global value chain governance remains speculative at best, more so without contextual data. Therefore, this research will

explore empirical data to assess and illustrate the exclusion of local producers, considering contextual specificities that serve as exogenous factors.

1.3 Research objectives

This study seeks to identify the implications of voluntary standards for local pineapple producers in Ghana in relation to the principles, applicability, relevance, reach, and ease of implementation:

- 1. To explore the critical governance structures within the certified pineapple sector in Ghana.
- 2. To examine the institutional dynamics of the certified pineapple value chain in Ghana.
- 3. To understand the implications of standards on local producers in Ghana.
- 4. To highlight policy implications for voluntary standards in the pineapple sector in Ghana.

1.4 Research question

This research was question-driven. The questions articulated were essential for defining the research, creating an orientation for the research, setting boundaries, and catalysing an assessment framework to guide research activities (O'Leary, 2017). This research is hinged on the central hypothesis that voluntary standards provide a useful framework (governance system) for smallholder farmers and other local producers to improve their performance, access better markets, and build economic resilience. The following research questions were constructed to test this hypothesis:

Main question: To what extent does the adoption of voluntary standards impact local producers' participation in the global pineapple value chain?

Sub questions:

- 1. How does the value chain governance structure affect the adoption of standards and producers' participation?
- 2. What are the implications of voluntary standards for local producers?
- 3. Under what conditions can standards prove more beneficial to local producers within the pineapple value chain?

1.5 Organisation of the research

Following Chapter 1 which highlights the background of the pineapple sector in Ghana and the global trends related to standards to present readers with a formidable understanding of the research problem, Chapter 2 will open up a discussion of extant literature on global governance, an examination of the institutional context within which standards in the pineapple sector operate, and lay out the theoretical frameworks for the study. Chapter 3 will describe the methods used to collect the relevant data for the study, their relevance and the rationale for the techniques and strategies adopted for data analysis. Chapter 4 will synthesise the main findings of this qualitative research with particular emphasis on the nuanced context of this research and present a comparative analysis of how contextual factors shape the effectiveness of voluntary standards and how local producers' challenges with accessing the common goods of voluntary standards. It will present an understanding of policy support failures, if any, of structural ineptitude and exclusive political and standards governance systems. Chapter 5 will draw out policy implications and recommendations for macro, meso and micro-level action based on findings from the research. Chapter 6 presents the overall conclusion from the research. It further puts forth some critical reflections of the theories used, and makes suggestions for future research to support this body of work.

Chapter 2 Literature Review and Theoretical Framework

2.1 Introduction

This chapter serves two primary purposes. First, I review a selection of literature to determine what has already been established about value chain governance and its criticisms, the consequent impacts of this governance, and the position of local context to the dynamics witnessed. This, I do, to identify the theoretical frameworks that will guide the research design and analysis. Secondly, I identify the contradictions and gaps within the literature for my research context, which then provide pointers for this empirical study.

2.2 Global value chain governance

Kaplinsky and Morris (2003:9) make a noteworthy revelation that it requires more than production efficiency to penetrate global markets and that successful entry into international markets "requires an understanding of dynamic factors within the whole value chain." One such factor is value chain governance.

Gereffi and Korzeniewicz (1994:97) defined value chain governance as an "authority and power relationship that determines how financial, material and human resources are allocated and follow within a chain." Gibbon et al. (2008:319) further elaborate this as "the content and the management of ... decisions across all suppliers and sub-suppliers, the strategies behind the decisions taken, management methods chosen to implement them, and the systems through which their outcomes are monitored and reacted to". This indicates that governance is a direct relationship between standards originators and value chain actors in a certified value chain. A key determinant of the type of governance within value chains is the presence and direction of information flow. Lead firms within global value chains have become the de-facto inventors and prime movers of standards. (Dietz, n.d). These firms can be producers or buyers and typically take the responsibility of creating, monitoring, and sometimes facilitating the compliance to voluntary standards. This behaviour is captured aptly by Altenburg (2006:499) as the characteristic lead firms have to "identify dynamic rent opportunities and production system accordingly." According to Sexsmith and Potts (2009:1), voluntary standards "affect decision-making processes in global value chains by appropriating and redistributing power to set, implement and verify compliance with the terms of chain participation". These decision-making processes of global value chains have been compared to the legislature, judiciary and executive arms of public governance (Kaplinsky and Morris, 2003). Within the voluntary standards system, legislative governance concerns itself with standards-setting, proffering the rules and regulations expected to be adopted by suppliers. This has become the prerogative of international and national standards bodies. Judicial governance monitors local producers' and suppliers' performance and is delivered by auditors and some standards agencies in recent times. Executive governance relates to implementation and the systems established to assist and manage the adoption of standards – this includes farm unions and related associations and offices which represent farmer interests.

Voluntary standards possess the power to engender inclusive participation of actors along value chains. However, they are also likely to reinforce exclusionary tactics, especially against producers who already feel economic marginalisation. To understand the implications of standards within a particular value chain, it is necessary to assess the type of governance and decision-making processes within that chain to understand its implications for producers better. The next section lays out the theoretical framework within which the forces of value chain governance and institutional contexts will be examined for the research

Typology of Governance (Gereffi et al. 2005)

Gereffi and Lee (2016:27) assert that the Global Value Chain (GVC) framework was introduced to "better understand how value is created, captured, sustained, and leveraged within all types of industries" from two critical points: governance and upgrading. An understanding of this governance, which is useful for the administration of risks and profits, has been further expounded by Gereffi et al. (2005) by assessing the spectrum of possible governance based on existing variables and the exercise of power. Gereffi et al. (2005) developed a seminal typology of value chain governance systems. By elaborating on the network type of governance deduced by Humphrey and Schmitz (2000), they analyse the factors that influence value chain governance alternatives. This seminal work elucidates the dynamics of the interactions and power asymmetries in global value chains between standards inventors, suppliers, and consumers. This 5-fold typology aims to describe the significant differences between the five value chain relationships theorised – an explanation of the concentration of power in lead firms and the consequential impact dynamics between two extremes of a market and hierarchy relationship. The typologies are deduced by a systematic understanding of the presence and magnitude of 3 independent variables:

a. The complexity of information and transactions

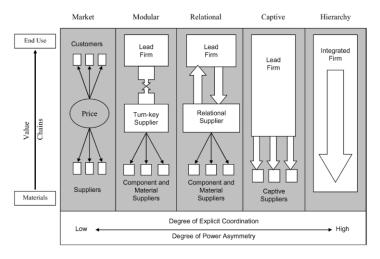
- b. Ability to codify this information and transmit this information
- c. Capacities of suppliers within the supply base

Figure 1
Determinants of GVC governance

Governance type	Complexity of transactions	Ability to codify transactions	in the	Degree of explicit coordination and power asymmetry
Market	Low	High	High	Low
Modular	High	High	High	1
Relational	High	Low	High	
Captive	High	High	Low	\
Hierarchy	High	Low	Low	High

Source: Gereffi et al. 2005

Figure 2
Typology of GVC governance



Source: Gereffi et al. 2005

Transactions at the market governance level require very minimal formality between actors. Here, there is little to no difficulty in knowledge transfer between actors, facilitating the ease of repeat transactions (where necessary). Suppliers in the modular governance system survive on production to meet customer requirements. Within this governance system, suppliers tend to assume responsibility for process and production standards, often riding on high volumes of information flow in the forward and backward directions of the chain, recognising the presence of codified information to enhance information simplicity, for instance, private sector voluntary standards. Within this space, the cost of

switching between buyers is low as information is generally codified, and there are many buyers on the market. In the relational governance system, information complexity is higher than at the modular governance level; hence information is not easily conveyed, absorbed, or adapted. The captive governance system is characterised by an asymmetric power relationship where suppliers have little to no power. Their survival depends on transactions with a few buyers, who hold a higher portion of the relationship's bargaining power. Within the hierarchy market system, power is consolidated only at the buyer level. Suppliers and local producers are therefore stuck within a buyer-owned vertical integration system with higher managerial control.

There are indications that value chain governance changes impact producers' long-term competitiveness, allocation of risks and revenue redistribution, learning and upgrading, amplification of entry barriers, consumer prices, and supply quality. There may be some dynamism and overlap within the GVC governance systems. Nonetheless, Gereffi et al. (2005:96) note emphatically that this mobility and overlap "depend on the details of how interactions between value chain actors are managed and how technologies are applied to design, production and the governance of the value chain itself." This reveals that action and interaction are the requisite elements that can propel value chain mobility from one typology to another. These shifts in GVC governance reflect a continuum of governance possibilities. They can be attributed to the interplay of transactional complexities, producer/supplier capability, and the degree to which knowledge can be codified (Gereffi et al. 2005). Following Gereffi et al.'s (2005) typology, this research will focus on the pineapple sector in Ghana to understand the details and complexities of GVC governance, leveraging the unique sectoral, geographical, and historic specificities to bridge knowledge asymmetries, determine the nodes of constraint, and influence policy action.

The impact of voluntary standards on value chain governance is best understood as the interaction between the institutional context, structure, and influence of specific local adoption determinants. The general global value chain governance literature particularly examines the impact of external value chain forces as an entry to validating their effects on social and economic upgrading in developing countries (Gereffi et al. 2005). However, leanings from the literature on standards, while they have tried to be global, are better-understood case by case. Hence, a more in-depth, localised view of governance has become necessary especially for the benefit of local producers, to uncover the -economic and institutional framework of governance present (Schmidz and Nadvi 1999). Lund-Thomsen and

Pillay (2012) consider the latter essential to local cluster upgrading. This research will engage the Institutional Analysis and Design framework to investigate particular features of the local political economy and other sociological factors and gain clarity on the impact of institutional contexts on the local value chains.

2.3 Institutional Analysis and Development (IAD) Framework

Elinor Ostrom originally conceived the Institutional Analysis and Development framework (IAD) in the 1980s. This framework sets out to "understand how institutions operate and change over time" (McGinnis 2011:1). The framework highlights the individual and related functions of actors, emphasising the variables with which and within which they operate to locate them within a "foundational structure of logical relationships" (McGinnis 2011:1). This framework lends its mind to the outcomes of the (non) performance of actors identified to determine actors' role in mediating outcomes and reorganising actors (where necessary), rules, norms, and rejuvenating institutions for policy action.

Source: Ostrom 2005

Another usefulness of this framework is that it is multi-purpose and highly modifiable, allowing room for revealing step by step relational complexities. This framework will provide a practical analysis of the institutional variables to unearth relational deficiencies and influence change and policy action.

Elements of the IAD

The IAD's physical and material elements are the distinctive characteristics of the certified pineapple value chain and influence how actors act and interact. In most cases, these characteristics can be modified and upgraded based on institutional action. According to McGinnis 2011:16, the community

attributes include a "common understanding, social capital, reciprocity, and a cultural repertoire" as well as systems of beliefs highlighting all social, environmental, and cultural contexts. The rules in use form the normalised, sociological, and sometimes political rules that inform engagement, rather than the formally established rules of engagement. According to Polski and Ostrom (1999), this rules-in-use give credence to the actors' (in) actions, interactions, and outcomes to be expected. Theesfeld (2004:253) paints a vivid picture of the rules-in-use when she asserts that "rules in use pave the way for opportunistic strategies." These strategies then influence new rules-in-use, and as a result of higher incongruities, the likelihoods for opportunistic strategies increase once again and so on. McGinnis 2011 confirms this when he says that rules are "themselves outputs of other action situations." Ostrom (2005:172) calls this the "articulated sense of moral or social obligation" that guides interaction.

A combination of the physical and material interactions, community attributes, and rules in use inform the patterns of interaction and visible outcomes (Ostrom 2005). This variable highlights the processes by which the actors engage each other and with what resources they work. These processes occur within the action arena, the focal unit of analysis, and it is where (mis) matching interests and power are located. Results from evaluating the interactions within the action arena help provide guidelines regarding avenues for improvement of outcomes. The IAD is a flexible framework; it allows for a multiplicity of action arenas between various actors. The outcomes observed result from the interactions between actors and relate to the choices made with resources available in the presence of power asymmetries. Although the IAD does not fully develop the evaluative criteria in detail, it gives room for the research to identify relevant areas for evaluation, as is necessary. These criteria will be used to judge the system's performance. Potential evaluative criteria may include efficiency, accountability, equity, participation, and adaptability. The IAD serves as a tool to analyse institutional formation and dynamics, diagnose collective action problems, prediction of outcomes

The IAD framework will investigate and establish the hypothesis of standards evaluated against Ghana's pineapple sector's general and institutional context. Bearing in mind that the rents and profits of standards are often sustained when the constituent elements of the standards' theory of change are in place, this juxtaposition will help to ascertain if these components are indeed present; the absence of which form a limitation, or if they are present, then a need for a further investigation to determine why they fail to produce intended outcomes. When combined with other frameworks, the IAD is a valuable lens to understand different socio-political systems and processes that dictate behaviour. This

IAD framework is useful for this study because the opportunities and limitations of voluntary standards are more substantially understood within context and the IAD situates analysis within specific contexts.

Combining the typology of governance and the IAD

Individually, the GVC governance typology and the IAD framework illuminate issues and complexities within the value chains. However, the integrated analysis of both will help determine the dynamics of action and how one influences the other. The GVC typology will highlight the specific type of governance within the pineapple value chain in Ghana. Based on this, the IAD framework will be used to uncover the causal inferences and impact of value chain governance on the other actors or otherwise, or reveal how the outcome of these two observations reinforce one another and lead to the radical exclusion and dislocation of smallholder farmers and other local actors from participating in the value chains. This framework will be used in combination with the governance typology outlined earlier.

The burgeoning literature on global value chain governance repeatedly emphasises the direct implications of the governance and institutional context to local producers' economic and social upgrading opportunities. Gereffi and Lee (2016) note categorically that a value chain's governance structure is a crucial determinant of the possible upgrading outcomes within that value chain. While this is true, the implementation of standards is noted to be used as a "governing device" (Gereffi and Lee 2016:29) of global value chains, and it is increasingly shaping upgrading opportunities for local clusters (Gibbon and Ponte 2005). A systematic review of the literature on standards highlights the specific impacts of standards' governance on upgrading difficulties, value chain restructuring, revenue distribution, and market participation. The next section will examine some of these impacts of governance.

2.4 Implications for local producers

Upgrading

GVC governance is strategically linked to enterprise upgrading in the global production networks and standards literature. Upgrading means acquiring the required technological and market capabilities by value chain actors to improve their competitiveness and production outcomes (Mitchell et al. 2009). The concept is used to assess positive economic and socio-economic outcomes for producers and

workers in value chains. The literature on value chain upgrading groups the different strategies and outcomes under two broad headings to illuminate the social and economic amplitudes of upgrading.

Economic upgrading is defined as "a move to higher-value activities in production with improved technology, knowledge, and skills, and to increased benefits or profits deriving from participation in GVCs" (Gereffi 2005:161 as cited in Gereffi and Lee 2016:26). This concept of upgrading is promulgated as a necessity for producers' economic development and is often associated with the enterprise competitiveness literature spearheaded by Porter (1990). Gereffi and Lee (2016:26) note, nonetheless, that economic and social upgrading, especially for workers and communities linked to global value chains, is a "vexing development problem." Value chain interactions between lead firms and local producers typically result in either vertical integration or reliance on arm's length market coordination (Altenburg 2006). Hence, local producers learn to adopt diverse survival strategies dependent on institutional support available, experience, or proximity to relatively better means of production. Gibbon (2003) asserts that this relationship has led to the development of various upgrading possibilities that distinctly link value chain governance to upgrading opportunities, which he argues, could offer more stable returns for actors at the bottom of the pyramid.

Humphrey and Schmitz (2002) will further confirm the importance of economic upgrading by illustrating the variation between 3 main types of economic upgrading; process, product, and functional. Process upgrading constitutes the continuous re-organisation of production and management systems aimed at improving performance and reducing costs. This includes the adoption of new knowledge systems or the use of some superior technology for production. Product upgrading involves activities or policies aimed at improving product quality or adopting more sophisticated means of production to enhance the value of output. This includes the adoption of certification or voluntary standards systems to guide production. Process and product upgrading are often interconnected. With the emergence of voluntary standards, these process and product upgrading mechanisms are streamlined to make adoption and outcomes more accessible. Functional upgrading determines the vertical integration options available to local producers and occurs when actors reposition themselves to undertake other functions within the value chain. This is also considered a form of inter-sectoral upgrading where an actor migrates to a different value chain/sector with skills acquired from another. Expanding on work by Bolwig et al. (2010), Kilelu et al. (2017) added two additional upgrading strategies available to smallholders within the value chains: Value chain coordination upgrading (viewed through the lenses of horizontal and vertical coordination) and institutional context upgrading.

Muradian and Pelupessy (2005), in a study of coffee producers, argue that the adoption of standards is not a guarantee for price premiums and may be used as an avenue for standards to reap 'economic rents' from the progress of producers upwards the value chain. However, they also acknowledge that upgrading can destabilise producers' risk of marginalisation from value chains and facilitate coordination with other actors at that level and improve producer commercialisation. Another study by Kadigi et al (2007) showcased varying results of expected upgrading impact where results from a control group and standards-compliant fisheries sector research revealed that compliant fishers received higher prices and general incomes than the counterfactual group.

Also situated within these value chain upgrading systems is the concept of social upgrading. Social upgrading is the "process of improvement in the rights and entitlements of workers as social actors and the enhancement of the quality of their employment" (Barrientos et al. 2011:324). The International Labour Organisation's (ILO) framework on decent work further deconstructs social upgrading into measurable standards and enabling rights. Measurable standards are more easily quantifiable and monitored and include paid wages, working conditions, and employment type. Enabling rights entail the more nuanced and less visible but critical aspects of employment, which are unquantifiable such as collective bargaining power, non-discrimination, worker voice, and empowerment (Elliot and Freeman 2003; Barrientos et al. 2011). An absence of these enabling rights can negatively impact the development and productivity of especially marginalised labour groups (women, migrants, and the disabled).

Some implicit assumptions exist that economic upgrading directly impacts social upgrading through better wages and more decent jobs (Gereffi and Lee 2016). While this may hold in some areas, Barrientos et al. (2011:325) admit that this outcome "may be thwarted if the employment created is highly insecure and exploitative." As firms strive to meet heightening commercial obligations, the need for a resilient workforce is becoming more relevant now than ever, and standards often directly dictate the relationship between firms and their labour force. The global agricultural scene, as it is set up now, is mostly buyer-driven. It is characterised by buyer-firms, typically large retailers in developed countries, setting up low-cost, labour-intensive production networks. Despite workers' massive relevance within these value chains, there has been limited information about labour rights in literature (Pegler and Knorringa, 2007) with more of the focus residing in firm dynamics, and labour treated as "an endogenous factor of production" (Barrientos et al. 2011:322).

However, fairly recent literature on workers' rights has begun to look at social protection, gender, safety and job security, unionization, and child labour. In contrast to economic upgrading studies that

focus on technology and skills development for productivity and quality, social upgrading is necessary to understand how firm upgrading can improve labour conditions; and how that can have a domino effect on their economic development.

While it is expected that value chain upgrading, regardless of size, holds a promise for local producers as they are engaged in process and product development and will most likely be endeared to the market, value chain upgrading strategies are, often, however, limited by the absence of information, finance, logistics, marketing, and other such factors; showing that the institutional context of a specific value chain may hinder or promote upgrading opportunities. For producers in certified value chains, this highlights the impact of the mechanism of standards on upgrading and consequent livelihoods development as an issue of concern. Most standards presently demand the adoption of upgrading strategies by producers, by way of "specific requirements, prescribed changes in organisational processes and production practices" (Von Hagen and Alvarez 2011:20). In the face of producers' implementation of standards, local producers' contextual realities may become enablers or inhibitors to entry and further upgrading.

Market participation

The fate of local producers in highly standardised value chains is of particular concern, given their essential role in domestic and international markets. Raynolds (2017) notes that smallholder farmer participation in organic value chains, for example, is controlled by the requirements of certification institutions. Smallholders are recognised worldwide as key producers of food and other agricultural products and are the leading providers of certified products in some export countries. At the same time, it is in rural areas and the smallholder sector where high indices of poverty prevail.

Von Hagen and Alvarez (2011) note that the smallholder market participation remains an issue of contestation in literature. Generally, market participation for smallholders is attributed to several factors. Certification presents benefits of better access to value chain information, which improves access to markets requiring certification in a space where non-compliant producers are automatically excluded. Even in general markets, the difficulty of access to information and other resources presented by certification and institutional contexts propels certified producers even more quickly into non-certified markets. In more in-depth research, some studies have also tried to identify whether these certified markets are convenient and readily available to a larger number of smallholder farmers compared to the traditional markets. This discourse remains vital to understand the nodes of exclusion

of smallholder farmers in markets considering the incidence of value chain restructuring from a majority smallholder supplier base to the more technologically-advanced, 'credit-worthy' production firms.

The literature on participation shows some standards as inclusive (example Fairtrade) when comparing current Fairtrade practices and objectives to the former. In contrast, comparing current Fairtrade practices to non-conventional chains reveals the likelihood of exclusion of smallholder farmers within the Fairtrade chain (Calo and Wise 2005). In the case of Global GAP, Dolan and Humphrey (2000) claim that over time in Kenya, export supplies from smallholder farmers had reduced to 18% from the 75% it was about a decade earlier. However, this was countered by Jaffee (2003), who contends that although smallholder supplier percentages had decreased, the volumes of supply from smallholders remained the same, indicating possible smallholder farmer exits and increases in smallholder productivity. More generally, Global GAP standards have received some specific criticisms of focusing disproportionately on compliance issues much to the exclusion of institutional and infrastructural constraints (Rios et al. 2009).

The research on standards is rich on the impacts but not very much beyond that. This gap distorts the realities of the purported ultimate beneficiaries of the standards: local small scale producers. This research will explore the mechanism of voluntary standards within the pineapple value chain in Ghana as a function of the contemporaneous relationship between the local institutional characteristics, standards framework, and value chain governance.

The research does not set out to critique any particular standards. However, the focus is to unpack the mechanism of voluntary standards as an entry to expose loopholes within the current systems of practice. The point of the departure of the research is the realisation that the eminence of private standards, although useful, have created an alteration and unfair balance, creating some forms of social as well as economic inequalities. Considering leading theoretical debates and the approaches of standards, I will explain this research problem and conduct my analysis based on global value chain governance theories and the institutional analysis and design framework.

2.5 Conclusion

This chapter reviewed related literature to ascertain what has already been established to identify the gaps that will underpin the study. It demonstrated the usefulness of the theoretical frameworks of value chain governance and institutional analysis to frame the central research hypothesis - voluntary

standards provide a useful framework (governance system) for smallholder farmers and other local producers to improve their performance, access better markets, and build economic resilience - and the overall research question - "to what extent does the adoption of voluntary standards impact local producers' participation in the global pineapple value chain?"

Chapter 3 Methodology

3.1 Introduction

This chapter describes the research methods and methodology adopted for this research and their particular significance to the topic. In the chapter, I further expand on the research strategy's systematic procedures, research method and approach, sampling and data collection, data analysis, ethics and positionality, and limitations of the study.

3.2 Research method and strategy

Qualitative research method and techniques were used to meet the objectives set at the beginning of the research. This was also useful as the sample size used was relatively small. Hence, the focus lay on gathering and analysing the subject matter's descriptive and narrative elements, without limiting the research's scope or diluting interview responses (Collis and Hussey 2003). By employing a qualitative and comparative technique for data collection and analysis through primary and secondary data sources, I identified the existing theories on the topic; and analysed the arguments and counter-arguments presented. This proved helpful throughout the data collection and analysis process because the qualitative method augmented the arguments of depth over quantity and helped to "explore and understand the interactions, processes, lived experiences and belief systems" of the respondents (O'Leary 2017:260).

While this research is an addition to the burgeoning literature on voluntary standards and value chain governance, it adopts a contextual approach to understanding the elements that influence value chain governance and subsequent implications for local producers within the certified value chain in the pineapple sector in Ghana. It is a build-up on an existing academic research subject with a particularly refreshed lens on Ghana's local contexts.

This research followed the deductive approach to researching. Deductive reasoning has been explained as "reasoning from the general to the particular" (Pelissier, 2008:3), and this approach was beneficial to this research. By reviewing extant literature on the topic, two theoretical frameworks – global value chain governance and institutional analysis and design framework - were adopted. I developed the research question(s) and hypotheses based on the existing theories and literature govern-

ing voluntary standards, governance, and their consequent implications for actors. Following the hypotheses, I designed a research strategy to test these hypotheses. The research strategy involved a consistent test of the relationships witnessed between variables and where there may be undocumented variations. Based on these strategies, I deduced the conclusions from the observations witnessed. This deductive approach was relevant for establishing the causal relationships between the theories in literature and their representation within the context of the pineapple value chain in Ghana. This was also useful as there was a short time for the data collection and analysis, and hence this approach helped identify the most relevant data to the study.

3.3 Data collection methods and tools

The sources of data for the research were many, and hence I ensured to use a consistent and systematic process, leveraging dependability of data from one source on the other. This was critical for triangulation, ensuring that data was accurate from all quarters and barring any subjectivities present. The research questions developed were useful for identifying the most essential participants in the research and how best to engage them. The main research question also influenced the data collection methods and tools used.

I employed the semi-structured interview method to understand the subject matter more in-depth from the various interview participants. These interviews were carried out in an online forum (taking advantage of Zoom, Skype, and WhatsApp platforms as I couldn't travel for my in-person fieldwork). Some of my interview respondents (mainly farmers and farm workers) could not directly access the internet. Hence, I employed the services of a field research assistant to conduct some interviews on my behalf.

Furthermore, document analysis was used to understand the realities of the data collected. This helped trace the data collected back to literature to support or refute the research hypotheses. The document analysis also helped expound the nature of governance and institutions within Ghana's pineapple value chain.

Data sources

Primary data - Semi-structured interviews

Employing the semi-structured interview in this research was useful to understand the problem following a questionnaire. However, the semi-structured nature of the questions allowed the flexibility to go in-depth on answers provided to understand narratives deeper and reveal any new knowledge on the topic. Smallholder farmers, local producers, farmworkers, coordinators of farmer-based organisations, value chain and market access experts, certification agencies and auditors, and other industry leaders were interviewed for this research. Participants were carefully selected since their experiences and data shared provided a basis for triangulation.

Secondary data - Desk research, literature review, document review

To better coordinate the secondary data needed for the research and ensure effective triangulation, I followed subject-matter data from academic publications, books, and journal articles published by credible institutions and entities in topics related to the research. The focus of my secondary data collection process was to identify existing literature on global value chain governance and production networks, voluntary standards, institutional analysis, and the impact of voluntary standards on local producers. Further, I utilised reliable reports from credible organisations such as the World Trade Organisation, International Trade Centre, Ministry of Trade and Industry in Ghana, The German Development Agency in Ghana and the ISEAL Alliance2.

Data collection

Using the snowballing technique of sampling, I sourced interview respondents from my immediate circles, who were then asked to refer other relevant participants for the study. As this study does not focus so much on generalisation but rather the more critical view of the issues, I used snowballing, particularly for its purposiveness. This ensured that only the most relevant people were contacted for an interview, considering the time limitation. The workplace dynamics of the Covid-19 pandemic and its accompanying measures were taken into consideration. Therefore, ample time was given for data collection from the semi-structured interviews. Interviewees included smallholder farmers and other local producers, value chain experts, standards certification agencies and auditors, civil society leaders, and agricultural development experts selected purposely for their rich understanding of the issues. The selection was made with the goal of 'representativeness' in mind (O'leary, 2017).

3.4 Data analysis

For the research analysis, I applied the triangulation approach of analysis to buttressed (or refuted, if that be the case) data gathered for the various sources. This approach also helped me to conduct follow-up data collection interviews, especially for sensitive data and where credibility was needed.

² ISEAL is the membership organisation for global sustainability standards.

The triangulation technique enabled me to compare and validate information gathered. (O'leary, 2017).

I employed a systematic review of the literature on the forms of governance within value chains. By comparing with primary data collected, I deduced the precise nature of governance within Ghana's value chain. For my data analysis, I enumerated and coded the primary data collected on types and flow of information into an information flow diagram, reinforced the analysis of the governance system identified. I employed a Critical Discourse Analysis to explore different aspects of the phenomenon of voluntary standards in Ghana, particularly how local, economic, and governance factors may or may not differentiate Ghana's context from global contexts (Given 2008). By focusing on existing universal, epistemic narratives that construct the perceptions of voluntary standards available, the discourse analysis framework provided a point of enunciation. Also, I employed the use of a Narrative Analysis will be useful to analyse the results of the semi-structured producer interviews. By using case studies where needed, I highlight the narratives of affected small scale producers and experts.

3.5 Ethics and positionality

In addition to being an academic endeavour, this research process doubled as a reflective and learning period for me. Having worked on other global standards frameworks myself, I appreciate the importance of voluntary standards and recognise that to benefit from them fully, specific barriers need to be disengaged. Before conducting the interviews, I contacted the potential respondents to inform them about the research and requested their involvement due to their positions to the research topic. After receiving their consent, I scheduled the interviews and, in some cases, sent the questionnaire ahead of the interview. After data collection, I forwarded my understanding of their responses through theme coding and analysis to the respective respondents to ensure that their information was rightly captured. Furthermore, where required, the confidentiality of respondents has been guaranteed – regarding data storage and access. The research was carried out following laid down protocols for social science research to avoid any forms of researcher bias

3.6 Research limitations

While the original data sample was 30 smallholder farmers and local producers, preliminary investigations coupled with the emerging Covid-19 proved that this focus of data collection was not possible

over the short research period. Therefore, I decided to speak with different respondents whose responses could be triangulated against the other to provide reliability and credibility. Hence, using the snowballing technique, I spoke with three people, each from the value chain and market experts, local producers, certification agencies and auditors, the Ministry of Food and Agriculture, and Farmer-Based Organisations. Nonetheless, the limitation of time and physical location made this a challenge as well, due to the workplace adjustments to Covid-19 and so it took a while to arrange the interview schedules with respondents. Additionally, as I was unable to travel and therefore resorted to internet correspondence and the help of a field assistant (who was adequately briefed on all aspects of the research and their role), the study is unable to speak much to analysis which requires a visual appraisal of participants and their environment. Where this is important, a note has been made in the footnotes to guide readers.

While the small sample size offers no guarantee that the findings are representative of the broader population, it nevertheless provides credible insights and anecdotes on the topic - it leverages perspectives shared to examine the gaps present.

Chapter 4 Findings and Analysis

4.1 Introduction

This chapter presents an analysis of the empirical data gathered from the research. It shows the dynamics of the governance system present within the certified value chain and the position of voluntary standards to this governance. Further, it highlights the need for an understanding of the institutional context and draws implications of these institutional and value chain interactions for local producers.

4.2 The current value chain governance system

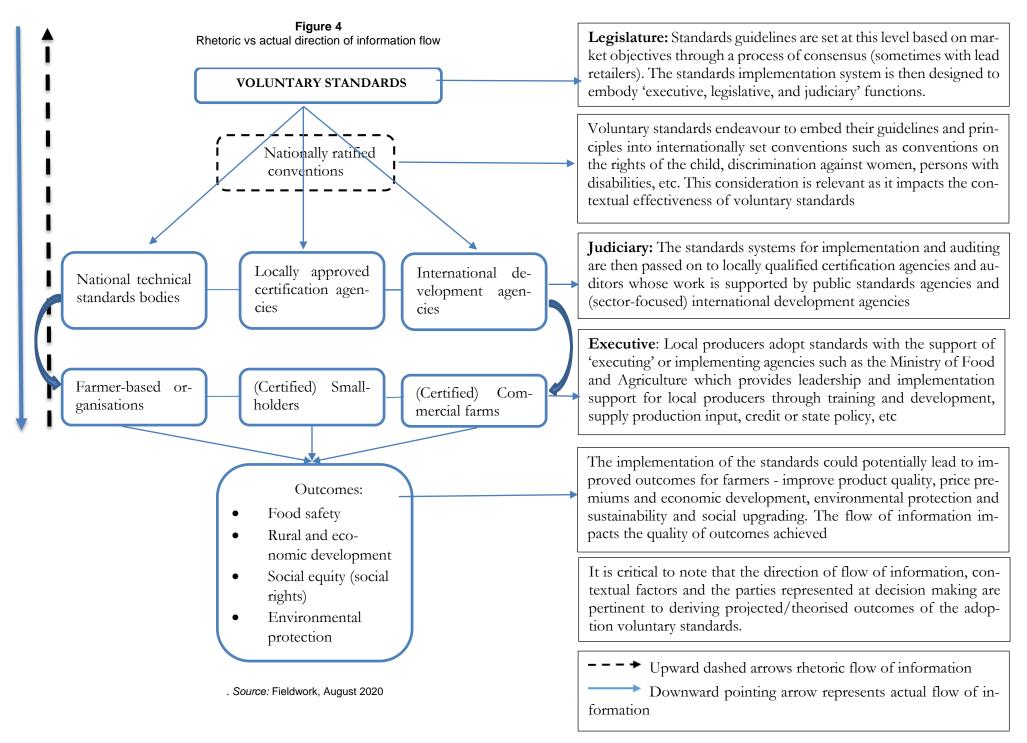
Extant literature on global value chains highlights that value chain governance represents power and control. To this end, Altenburg (2006) relates this governance with unshrouding potential barriers for local producers and understanding technology and innovation dynamics, upgrading, and distributional issues. The research shows a high complexity of information flow within the value chain, coupled with low supplier capabilities and an increased ability to codify transactions (by way of voluntary standards). Juxtaposing this data against Gereffi et al.'s governance typology framework, the research reveals a captive governance system within the pineapple value chain in Ghana. The table below reflects the dynamics of this governance.

Table 1Dynamics of the captive governance structure

Determinants	Operational level		
Complexity of transactions/ information flow	High		
Ability to codify transactions	High		
Capabilities in the supply base	Low		

Source: Fieldwork, August 2020.

In addition to a high degree of complexity of transactions, the degree of information, and knowledge transfer within Ghana's certified pineapple value chain is high. A look at the captive governance structure within this value chain exposes a uni-directional flow of information and merits elaboration. This requires increased transaction costs among value chain actors, as information is key to the distribution of risks within global value chains. Figure 2 below presents an assessment of the flow, utility, and control of information within the certified pineapple value chain in Ghana, which will help to understand the value chain governance better.



This unilateral flow of information illustrated is the current power and control structure within the certified pineapple value chain in Ghana. An open analysis of information flow within the value chain suggests a very explicit form of coordination - achieved by a top-down flow of information from lead firms to local producers - and a consequently high degree of power asymmetry. One commercial farmer noted that:

"everyone is thinking about how to do auditing and how to keep farmers accountable, they're doing everything but asking these farmers 'how do we keep you accountable?".

Though indistinct, commercial producers and smallholder farmers experience different levels of power asymmetries owing, for instance, to the subject of economies of scale.

Certifications provide detailed instructions in the form of product specification and production guidelines, leading to gains such as "the conservation of human efforts through the re-use of system elements" (Gereffi et al. 2005:85). In this study, the voluntary standards within the pineapple value chain have achieved significant success in codifying complex market information into forms that are easily accessible to producers and allow for structured monitoring of indicators.

Although there is interest and adoption of agricultural certification in the pineapple value chain, information gathered from the research establishes a low level of supplier capability, with suppliers performing below their optimal capacity. Most smallholder farmers primarily rely on intermediaries or local aggregators because of low product volumes, while the other local producers - commercial farms - can trade directly with retailers in the market. A smallholder farmer interviewed iterated that:

"we don't have the volumes nor the manpower to support exporting, so we are better off supplying to the local Swiss company."

Due to this limited capability within the supply base, local producers cannot leverage economies of scale for price bargaining. Furthermore, yields are lower than global averages, with local producers attaining yields of 40-50tons per hectare as against a global average of 100-110tons per hectare. A commercial farmer interviewed pointed out that:

"... people (retailers) complain about low volumes... and that more volumes will lead to more revenue, but 'more' is not the problem. The conditions have to be right - the incentives have to be right, and supply won't be an issue".

This captive governance structure has led to establishing arm's length relationships between local producers and lead firms.

"The reason farmers don't have the decision-making ability is that farmers don't control anything. They produce and wait for someone to come and buy, and retailers are always looking at their short term spread and power imbalances with the farmer. If you take away that dependency, you have given back to the farmer a huge part of the market", - noted a local producer.

Whereas the low supplier competence highlighted theoretically requires increased involvement by lead firms to improve supplier competency, this arm's length relationship eliminates these interventions. Instead, other local institutions have assumed the responsibility of working with local producers to enhance their capabilities. Local producers interviewed indicated that:

"we do not receive any support from our retailers in the market. We access our investments using our collaterals. The support we receive comes from the extension agents from MoFA³ by way of technical training on standards guidelines".

This was confirmed by a certification advisor who highlighted that:

"there are a lot of donor agencies and non-governmental organisations who are also supporting this certification programme because certification is an expensive thing ... and so this has improved the acceptance of certification".

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³ The Ministry of Food and Agriculture in Ghana

Nonetheless, suppliers still face substantial switching costs and are consequently 'captive' to their relationships with the lead firms - or the middlemen and global retailers. Even in the absence of any high intervention cost on the part of the lead firms as well as lack of any direct monitoring and control, the generally low level of capabilities in the supply base encourages a "buildup of transactional dependence" (Gereffi et al. 2005:86) at the local producers' cost. Local certified pineapple producers remain locked-in to their buyers. They have become dependent on single dominant buyers, reaffirming Gereffi et al.'s (2005) postulation that lead firms "provide enough resources and market access to subordinate firms to make exit an unattractive option."

Voluntary standards and governance

Increasingly, voluntary standards are assuming a navigator role in the governance of agricultural value chains. By setting the guidelines for implementation and conditions for participation in Ghana's pineapple value chain, the voluntary standards highlighted in this study have become a significant player in governing the value chain. By enabling a hands-off⁴ approach by buyers in the certified pineapple value chain, these standards systems' governance resides with certification bodies.

The voluntary standards within the pineapple sector have appropriated the prevailing captive governance system. Their operationalization and implementation take the likeness of the institutional dynamics present in the value chain. The next section describes these institutional dynamics further.

4.3 Understanding the institutional context

A critical dimension absent from the typology of value chain governance is the degree to which contextual, and other exogenous factors influence the governance structures and outcomes. A combination of democratic value chain governance structure and an enabling contextual background is argued to engender value chain upgrading and overall positive outcomes of voluntary standards. As discussed earlier, value chain governance is dependent on information flow and supplier capabilities, both of which are dependent on the efficient delivery of roles of actors within the local context. The research reveals that the characteristics of the prevailing institutional context do not lead to optimal benefits of local producers, despite the adoption of standards and the accompanying global market access. To

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⁴ buyers rely more on the brand image of these standards and have moved away from the direct monitoring of suppliers

this end, the voluntary standards have failed to deliver optimal impact for local producers who, in most cases, are the primary target group of standards' impact.

To better examine the context of voluntary standards in this research, an institutional analysis is performed to elucidate interactions between the actors, formal and informal rules, and the endogenous and exogenous variables within the pineapple value chain.

Biophysical environment

- Migration from smooth cayenne to market preference of MD2
- Favourable agro-ecology support pineapple production although the impacts climate change are emerging; adaptation required
- Average yield per acre (60-80 tons/ha) lower than global average – 120ton/ha in Costa Rica
- Easy access to key factors of production
 land, labour
- Absence of sufficient production support infrastructure (pack houses, road networks, etc)
- Public and technical educational institutes that support agricultural development
- Avg. smallholder farm size :2ha

Socio-economic attributes

- Majority of farmers reside in rural/periurban areas limited access to VC infrastructure
- Absence of bargaining power for local producers
- FBOs are small holder producers' ticket to certification
- · Access to credit facilities limited
- · Family-owned smallholder farms

Rules-in-use

- Decision makers are private standards bodies in consultation with lead firms
- Top-down certification governance approach
- Non-comprehensively inclusive decision making processes
- Newly introduced decentralised 'judicial'/ auditing systems
- Unilateral flow of information

Figure 5
IAD framework for the certified pineapple value chain

Actors

- Small holder farmers
- Farmer-based organisations
- · Commercial farms
- · Farm workers
- Voluntary standards bodies
- National standards agencies
- Local certification agencies
- Aggregators
- Exporters association
- · Civil society
- International development organisations
- Extension service providers
- · Processing factories

Action situation

- Certifications require knowledge, asset and action investment
- Local producers engage in production according to certification guidelines
- Contextual institutional factors in need of reform and improvement
- Women generally in 'unskilled' work with low wages
- Integration of farm workers as 'in-growers' and out-grower farmers within the value chains of certain commercial farms
- (cumbersome) Bureaucratic certification and auditing pro-

Source: Fieldwork, August 2020

Patterns of interaction

- Legitimacy and power reside in voluntary standards bodies
- Local certification agencies undergo training to support local producers with implementation and auditing
- Local producers implement standards to achieve 'barest minimum' required to certify and maintain certification
- National standards bodies act external to certification instead of integrated with certifications
 - Technical training provided by relevant support agencies
 - Limited research and development

 imperfect information flow
 - Absence of effective partnerships in the value chain

Evaluative criteria

- Social equity in producer communities
- Transparency and effectiveness of information flow within the value chain
- Efficiency of outcomes (economic impact, social impact, environmental impact)
- Sustainability of practices

Outcomes

- Value chain restructuring; entry of bigger commercial producers, exit of smallholder farmers
- Disproportionate revenue distribution; local producers impacted
- Farmworkers wage above minimum wage levels but insufficient for livelihoods improvement.
- Arm's length buyer-producer relationships
- Absence of functional upgrading impacts vertical integration options
- Latent value chain opportunity but untapped
- Loss of farmer agency which impacts social upgrading and socio-economic development
- Cultural differences in understanding of gender norms, child labour, etc

Exogenous variables

- Global pressure on food safety and sustainability
- Emergence of conscious consumers
- Standards emerge as a response to consumer demands
- International market saturated with voluntary standards
- Increase in trade in agricultural goods and services
- Global economic development – growth/decline/stasis
- Captive governance within certified pineapple value chain
- Globalisation of supply chains
- Emergence of Africa Continental Free Trade
 Agreement

Actors

Primary actors in this research include smallholder farmers, commercial farms – which are increasing in number - farmer-based organisations, and voluntary standards bodies (for this research, Global GAP, Fairtrade, and Organic certifications). Enablers include agencies such as the Ministry of Food and Agriculture, Ghana Standards Authority (GSA), civil society organisations, locally approved certification and auditing agencies, international development agencies such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), SNV Netherlands Development Organisation, TechnoServe, and the World Bank.

Action situation

Action situations reflect the interaction between actors, their positions within the value chains, their behaviour with information considering the payoffs present, and the anticipated outcomes of their decisions. There are three levels within the action situation present in the IAD analysis of the certified pineapple value chain. This research deduced the outcomes of the empirical, observed interactions and juxtaposed those against the rhetoric or expected outcomes.

Rules-in-use

Empirical analysis

Choices made at the operational choice level substantially impact outcomes witnessed by actors. When certified farmers in this research apply the certification systems' proper production guidelines, they observe outcomes such as better quality products and sometimes reduced operational costs. Typically, the support agencies' work also has various outcomes on the farmers' livelihoods. Within the certified pineapple value chain's action situation, support agencies such as extension service providers from the Ministry of Food and Agriculture, experts from development agencies deliver support and value chain information to farmers through training and development, and general support with standards subscriptions and implementation. Some interview respondents indicated that costs to certify are steep—"certification is expensive for the local farmer. For our group⁵, GIZ covered 80% of the certification cost and the other 20% split between us local farmers". This form of support catapults more farmers and farmer groups into global value chains.

However, within this same action situation, support with representation, bargaining, and agency within the global market is absent. Local producers express concern that "a lot of these bodies do the easy work by dealing with the local farmers but are not doing the tougher work dealing with the

⁵ This was a Farmer-based organisation of 38 members, each with a land size of 2 hectares.

government, dealing with the corporations who are buying and even going as far as dealing with the retailer. That's where the bulk of the work needs to happen". This leads to certified farmers positioning themselves as price takers⁶, often at the mercy of lead firms and buyers. Local producers note a disintegration of contextual institutional factors that need reform to maintain effectiveness.

Actors at the collective-choice level shape the rules which constrain operational choice actors. In this research, local producers highlighted the absence of ready logistics - such as pack houses and convenient modes of transport - high costs of export services and port bureaucracies as examples of rules which constrain their actions and impact their economic outcomes. For instance, the Ghana Export Promotion Agency, a national body, exacts high fees for training and development on export procedures, even though the government services this body. The absence of policies that protect farmers or support the agency and the bargaining power of local producers on the global market, such as with the cocoa sector's producer pricing, also impact farmers' and general livelihoods' earning levels.

Actors within the constitutional choice setting constitute the top hierarchy of institutions within the context under study and determine who participates in rule setting and decision making. The conveners of voluntary standards⁷ considered for this research constitute the constitutional choice actors, and they regulate how inclusion and exclusion take place within the value chains. Within the certified pineapple value chain, organisations such as the Ghana Standards Authority and Ghana Export Promotion Agency and other national institutions also have a mandate by law to act at the highest hierarchy. However, this research currently reveals that these organisations do not synchronously work in chorus with local producers' needs, and there remain contrarieties with the standards implementation systems. One market access expert interviewed for this research indicated that:

"their processes are prolonged and can cause a delay, for instance, in laboratory analysis even when urgently required. We have to resort to laboratories in Switzerland to ensure that our products will not be returned".

Another interviewee highlighted that:

⁶ The research records the presence of some farmer-based organisations. However, they are unable to leverage economic power or economies of scale for bargaining.

⁷ Global GAP, Fair Trade and Fair Trade Organic

"besides other biophysical factors that position Costa Rica as a global exporter of pineapples, their government has made it flexible for them to export. When you come to Ghana, the export cost is weighing things (down). The regulations keep changing, and exporters struggle to keep up".

By the nature of the mechanism of standards and the non-recognition of the impact of collective choice actions on local producers, an institutional void is created within the certified pineapple value chains.

Theoretical/rhetoric analysis

The rhetoric that binds the action arena of voluntary standards holds that all value chain actors can derive the expected outcomes of following the standard guidelines. This rhetoric deprives local producers of a thorough acknowledgement of contextual inefficiencies, creating an institutional void. It also misses the opportunity that voluntary standards bodies can leverage to support institutional context redesign, working together with nationally relevant agencies. Information is unilateral within the standards systems in the pineapple value chain. Without access to and the consequent power of full information, standards process reiteration becomes a mirage. The consistent interplay of these action situations directly impacts the normalisation of the formal and informal rules in use within the IAD framework, thereby legitimising the norms and patterns of interaction witnessed.

Patterns of interaction

Repeated voluntary standards governance patterns have led to the legitimacy of standards understood by all actors within value chains. Understanding these patterns of interaction clears any analytical ambiguity makes outcomes more apprehensible. While the rhetoric is that the legislature, judiciary, and executive within the value chains should exercise similar levels of power, a different narrative holds in the certified pineapple value chain. The research findings indicate that power moves from standards bodies to local certification agencies but not to the local producers, implementers of the standards (executive). The research data shows that local producers implement standards in ways that achieve the barest minimum⁸ required to certify and maintain certification. A common consensus shared which was voiced emphatically by an interviewee was that:

⁸ Barest minimum activities include wages slightly above minimum wage – in an economy where the living wage is 4 times the living wage - and the availability of social amenities on farms only during farm auditing visits (to save operational costs).

"the argument should move more into how many people are doing it right? Being certified doesn't guarantee that you are doing it right. When positive incentives are absent, people specialise in avoiding the stick. Instead of aiming for the carrot, they are avoiding the stick... people are incentivised to figure out how not to get caught."

Another pattern of interaction identified from this research is the absence of partnerships and horizontal coordination, especially for value chain upgrading purposes. Horizontal coordination is the persistent increase in "intra-nodal organisation, often in the production and processing nodes, in some form of collective" (Mitchell et al. 2009:26). In the social context of this research, producers prefer to work in silos, losing out on the advantage of pooled expertise and resources. A local farmer expressed, for instance, that

"...if the cooperatives come together and work to control the supply chain – that cuts out all the red tape and all the middlemen".

Additionally, there is difficulty in participation in multiple value chains for some certified producers from the research. While traditional markets still exist for local producers, Organic farmers, for instance, do not have the luxury of belonging to both certified and traditional value chains because of the risk of contamination. A smallholder farmer interviewed indicated that "one person's action can invalidate the group's certification, so group members keep a keen eye on each other."

Outcomes

The outcomes identified within IAD are a consequence of the exchanges between all variables identified. The hypothesis upon which voluntary standards operate is that they lift local producers out of poverty. A dominant result of the interactions of actors and variables within the value chain is the restructuring of the certified pineapple value chain with the increased entry of better-financed commercial producers and smallholder farmers' exit. The operationalisation of these commercial farms is similar to private sector management, and workers are considered valuable to production. A commercial farm manager interviewed noted that "we do performance and salary reviews annually, and the adjustment depends on the company's performance in the said year." All producers ensure to stay within the law with wages above the country's minimum wage levels.

It is worthy to note that standards assume the governance framework present within any value chain. Following this research, the embeddedness of voluntary standards within the captive governance framework means a definite insertion of producers into arm's length, captive relationships with buyers, and high, unattainable switching costs. There remains an untapped value chain opportunity, which is attributable to the absence of functional upgrading, which impacts vertical integration options, and the loss of producer agency, impacting social upgrading and socio-economic development.

Evaluative criteria

The evaluative criteria help assess the performance of the voluntary standards within the contextual institutional settings by examining the patterns of interactions and the outcomes produced. This research will focus on the following indicators for a political-economic analysis: efficiency of outcomes - economic, social, and environmental - social equity, transparency, and effectiveness of information flow and sustainability. These are expounded further in the next chapter as implications for local producers.

The potential of voluntary standards to lead to social equity outcomes for local producers has not been successfully tapped because of value chain governance problems and the absence of a robust local institutional framework that supports local certified pineapple production. Information flow within the value chain is limited, specifically, from local producers to other market actors such as buyers and standards conveners. The economic efficiency of standards is neither evenly nor equitably distributed among value chain actors. Due to resource limitations, this research does not perform an in-depth evaluation of the determinants and nodes of revenue distribution along the value chain, which will have drawn categorisations of producer, intermediary and retailer premiums – and a better understanding of retail value add, as well as actor input/output analysis. However, a brief trail of revenue distribution indicators within the certified value chain shows that a significant percentage of the profits reside with lead retailers. Net benefits within the value chain do not reflect resource utilization. For the local producers, this is attributed to contextual factors such as the absence of horizontal partnerships and bargaining power, vertical coordination models, and ineffective infrastructural systems.

Considering the normative responsibilities of actors, rules in use, patterns of interactions, and outcomes witnessed in the IAD, this research concludes that there is an institutional void present in the certified pineapple value chain. Mair and Marti (2008:1) describe institutional voids as "situations where institutional arrangements that support markets are absent, weak or fail to accomplish the role

expected from them." While there are the right legislation, policies, and regulations to guide agricultural sector work that can lead to maximum output, there is a disconnect in implementation. A sector expert noted that "there's a huge failure of policy not because the ideas are not there. The ideas are there and these ideas, when implemented properly, can lift communities out of poverty". Lehmann and Benner (2015) categorise this institutional void into four broad categories: access to information, contract enforcement, access to human capital, and access to financial capital. Within the certified pineapple value chain in Ghana, these implementation challenges are dire and particularly visible as a limited flow of value chain information, absence of local and national value chain infrastructural investments, labour mobility and development, and absence of an agricultural entrepreneurship ecosystem. Porter (1990) asserted that the endowment and utilisation of a nation's human, technological, and physical resources might promote or constrain value chain upgrading.

By exploring this institutional void, the research unearths stakeholders' interests and actions as an entry to examine inherent incompatibilities and hopefully understand trade-offs. Combined with the conformist nature of voluntary standards, they have resulted in the following outcomes being witnessed. Therefore, this research examines the implications of voluntary standards, their governance, and the institutional context for local producers.

4.4 Implications of voluntary for local producers

4.4.1 Upgrading

The hypothesis leading the assessment of the upgrading implication of voluntary standards holds that the governance structure within value chains significantly impacts local producers' upgrading opportunities.

Economic upgrading

By examining evident upgrading narratives within the certified pineapple value chain against Humphrey and Schmitz's (2002) illustration of the differences between the main types of economic upgrading, the research presents evidence that there is a substantial degree of process and product upgrading, but an absence of functional and vertical upgrading. Local producers confirm that:

"when we use the standards, we can sell to the middlemen who have specific product weight and visual quality requirements." With the adoption of voluntary standards and the implicated ability to codify information as guidelines for production, voluntary standards in the certified pineapple value chain present a categorical path for producers to reorganise and leverage improved production, management, and technology systems to improve operations, reduce cost and enhance the quality of products.

However, functional upgrading, the engagement in higher value-added activities, considered relevant to vertical integration, continues to be a mirage for local producers. The study reveals that there is an absolute nonexistence of vertical integration within the certified pineapple value chain. In Porter's (1990) enterprise competitiveness literature, he alludes the concept of upgrading as a necessity for producers' economic development. With this component missing in the certified value chain, the potential of voluntary standards to 'lift farmers out poverty' stands to be interrogated. Nonetheless, as propounded in earlier paragraphs, voluntary standards take the form of the value chain governance present in any context, and producer outcomes are influenced by the institutional context they find themselves in. While standards may have the potential to support vertical upgrading, the prevailing institutional arrangements within the certified pineapple value chain does not permit this. Vertical integration is highly probable when local producers improve profitability and can invest in higher value-added activities. This profitability from certification, for local producers, is a function of economies of scale and efficient institutional arrangements. This presents a challenging reality for smallholder farmers, as most farmers have an average land size of 2hectares9. In the absence of practical institutional arrangements as demonstrated in IAD above, local producers face barriers to improved process and product upgrading and, subsequently, functional upgrading. Building on economic upgrading narratives, there is a growing debate on if and how economic upgrading impacts social upgrading.

Social upgrading

There is an assumption that economic upgrading within voluntary standards systems should directly impact local producers' social upgrading opportunities. Knorringa and Pegler (2006) conclude however, in their study on Globalisation, Firm Upgrading, and Impacts on Labour, that firm upgrading does not automatically improve labour conditions, especially for low-skilled production activities. For

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⁹ The average land size for smallholder farmers within the general agricultural sector is 2hectares. This means any support provided should realistically be within the confines of improving logistics and raising profitability for the average land sizes, considering the land tenure system is one of a political contestation.

the certified pineapple value chain, an analysis of the ILO's decent work framework presents a dichotomy between the relative power of standards to ensure adherence and Ghana's inherent institutional machinery. The following paragraphs examine how social upgrading manifests within this value chain.

The global agricultural scene is currently market-driven. With the rise in the trade and consumption of agricultural products comes a surge in labour demand - primarily low-skilled labour. This leads firms to design operational setups and business models that maximise labour, lower production costs, and improve profit margins. This research reveals that labour is situated within two nodes in the certified chain as Un-skilled labour¹⁰ and Low-skilled labour (employed by commercial farms). The commercial farms in this value chain engage low-skilled labour in two ways: first as employed labour and simultaneously as either contractual out-growers (where the labour owns the land) or contractual ingrowers (where commercial farms own the lands). When engaged as general labour, the commercial farm pays wages and social security for labour. As contracted farmers, however, the relationship is a buyer/supplier or sharecropping relationship, with the contract farmers receiving production support from commercial farms. For the in-growers, this is a meaningful way to earn extra income. On the other hand, the out-grower farmers note that this model provides a better avenue to participate in certified value chains without the costs, risks and rigours of certification.

The research reveals that wages are 20%-35% above the national minimum wage levels, which, producers record, are not exactly influenced by voluntary standards. These earnings above-minimum wage may be a function of the local producers' need for higher worker engagement considering the vital role of agricultural labour. However, the question remains whether this is sufficient to support farm households in a way that disrupts the vicious cycle of poverty¹¹ witnessed over decades in rural communities. Whereas this generates pro-poor economic stimulus (Nadvi, 2004 as cited in Knorringa and Pegler 2006), it does not automatically mean a suitably improved standard of living. Additionally, social security, contributed at 18.5% total of worker earnings, is evidently low as wages are generally low. This subsequently leads to lower social security savings for agricultural workers and a projected low standard of living upon retirement.

 $^{^{10}}$ This labour is periodically engaged by smallholder farmers in an informal may, in times of shortage of family labour - such as for weeding or the transport of produce as head porters

¹¹ In 2017 the Global Living Wage Coalition and ISEAL Alliance performed a survey in the banana sector which showed that the "lowest paid 10% of general workers earned approximately 67% of the living wage, while the highest paid 10% earned approximately 80% of the living wage. The minimum wage in 2017 was GHS 238 (\$ 54) gross per month compared to a living wage of GHS 1028 (\$ 234). The current minimum wage about is \$ 62 per month. Source: The Living Wage Report, Ghana - https://www.isealalliance.org/sites/default/files/resource/2017-12/LivingWageReport Ghana.pdf

Data gathered from farmworkers highlights that while they are aware of the adoption of standards by their firms, they are uncertain of the related benefits accrued them due to the standards. Due to COVID-19 travel restrictions, this research did not cover a panoptic inspection of certified farms' working conditions. Data gathered from certified farms revealed that working conditions are generally satisfactory. At the time of the research, workers were provided with appropriate working apparel and support needed to work on farms in a dignified manner. This view was corroborated by farmworkers interviewed. However, it is unclear whether this adherence is influenced by voluntary standards or rather reflects the commercial farms' business management acumen.

The hypothesis for understanding labour for this research was that worker integration within voluntary standards is more probable and more participatory on smallholder farms where conditions were more favourable for labour. However, the research gathered that the smallholder farms predominantly use family labour and only engage un/low-skilled labour for menial jobs such as head porters for transporting produce. In this respect, this node does not present the best opportunity for decent, secure work within voluntary standards systems.

In applying a parsimonious approach to understanding the non-quantifiable aspects of labour, this research highlights the agency of farmers and labour, gender, unionization, and bargaining. With regards to labour participation and the implication of standards for local labour development, most commercial farms establish that the in-grower model is more beneficial to them than out-grower schemes:

"We took two approaches – the nucleus farms and the out-grower scheme but realised the out-grower scheme wasn't working as well as we wanted. We tweaked that model to form the ingrower model where our employees were given lands to cultivate. We reduced our working hours by about an hour or so, so they could work on these lands after".

Although commercial producers indicate reduced working hours to enable farm labour to operate their contractual farms, further research will be required to ascertain the impact of this arrangement on the quality of jobs within the in/out-grower farms.

While the in-grower model may prove more profitable to commercial farms, it may be an avenue for local land contestation, recognizing the relative financial power of larger farms to own lands, compared to smallholder farmers. The continuance of these and similar models of land ownerships, within

the laxly-regulated land tenure system in Ghana, may pose social and economic land security threats for indigenes and smallholder farmers. In the out-grower models discussed above, farmworker interviews indicate a generally higher agency and a heightened sense of social security since farmworkers also own their lands. However, in-growers remain bound to their firms, but may exit that relationship when it no longer serves them, albeit with minimal social security.

The research reveals a difference in the categorisation of labour roles within the certified value chain. While men and women were allowed to undertake the same activities within some commercial farms, other firms had role preferences that directly impacted the women's earning potential¹². Beyond the earning gap, the extent of voluntary standards' particular contribution to gender development in the certified pineapple value chain is neither explicit nor conclusive.

In all cases, there was limited to no labour organising within the certified value chain, which impacts worker voice and representation. An agricultural sector expert interviewed noted that "it is difficult to organize here. Unionization comes with victimization in our environment". This may reflect a larger systemic irregularity, having established that voluntary standards uphold the status quo. Yet, given the legitimacy voluntary standards have attained, it bears critiquing what role standards play to ensure the prioritization of workers' voice and representation – where workers' rights are fully present, workers organising is possible, and worker bargaining power is enabled. Yet another sector expert highlighted that almost all support agencies have an external relationship with farmers with respect to bargaining. Local producers are left to their luck and repeatedly end up as price takers, sometimes counting their losses:

"the challenge in the industry is most of us are price takers. And mostly, we don't have bargaining power. People try to bargain, but this doesn't work. The advantage we (referring to the interviewee's commercial farm) stand is that we have our marketing company sitting there (in Europe). This is not possible for many local producers in Ghana. If it continues like that, then you can't be in business for long".

Another respondent also reported that

¹² More women were involved in land preparation and harvesting activities. In contrast, the men, also involved in land preparation and harvesting, were also able to undertake skilled activities such as chemical application, thereby increasing their earnings.

"if you want to make a meaningful business out of these kinds of non-traditional crops, then your target is always the export market. So long as you don't have any local alternative, and you have no internal conditions in the export customers, you don't have the option of leaving it locally. Pineapple is perishable so that compounds the market problems".

While economic upgrading may not always lead to social upgrading opportunities, social upgrading, to a large extent, is more likely in the presence of economic upgrading. This economic upgrading is repeatedly absent within the certified pineapple value chain, or where present, unevenly distributed leading to weakened social upgrading realities. Within the research context, social upgrading can be possible by one of two paths: either a copious interest of farm management or robust labour and social protection mechanism with related sanctions for non-adherence. In the absence of a working institutional support system, social upgrading outcomes within this value chain are left at the mercies of farm management in a sector with limited economic upgrading. This hope is far-fetched, more so for women engaged in mostly unskilled activities such as land clearing.

A key question that remains unanswered is whether the economic upgrading activities lead to any higher skills development for labour, even if minimal. An interesting argument presented in more recent literature on the way forward for labour in global value chains is the potentially catalytic opportunity of Corporate Social Responsibility schemes (Blowfield 1999; Barrientos et al. 2003). While these are prominent and apposite in the more regularized agricultural sectors of the world, Ghana's agricultural sector's near-informality makes this impracticable.

Another important, yet often forgotten indicator for upgrading is environmental upgrading. Environmental upgrading is considered a by-product of economic and social upgrading. This research revealed that actors within the certified pineapple value chain are aware of voluntary standards' potential to contribute to promoting environmental sustainability; however, there were no clear indications of such explicit outcomes derived so far. As the prevailing institutional context does not optimally impact economic upgrading, environmental upgrading has not been prioritised. This research does not undertake a deep dive into the impact of standards on the environment to manage complexity given resources available. Notwithstanding, voluntary standards can engender discourse around proactive environmental management principles.

4.4.2 Market access and orientation

Unquestionably, certified farmers access markets that non-certified farmers do not. Local certified producers in the research authenticated that the ability to access the export market is beneficial. By avoiding market marginalisation based on producer location and product quality, the adoption of standards minimises producers' risk of marginalisation from international trade.

Voluntary standards promote this market access by their principles and market requirements. For most local producers within the value chain, with access to international markets comes an extended chain of intermediaries¹³, resulting in "limited availability of (end-) market information, distribution of value-added over a large number of actors, and longer transportation distances" (Trienekens 2011:53). A local producer stated that

"the problem is certification has given way to many middlemen. Capital allocated to the cost of elevating farmers out of poverty goes to the administrative cost of management of standards".

Trieneken (2011:53) relays that efficient market access relies on the right combination of local infrastructural capacities, market knowledge and bargaining power, and producers' technological capabilities. Upon further interrogation of the types of access and producers' bargaining power, this research gathered that producers engage in trade with very few buyers on the market and do not participate in any forms of price bargains.

Market access and price distribution factors often constrain developing country value chains. Some scholars like Muradian and Pelupessy (2005) have argued that standards do not automatically guarantee a price premium for local producers in developing countries. In a more in-depth exploration of this argument within the data collection process, local producers reveal that though there is a higher price guarantee in the export market, this does not equate necessarily to price premiums:

"farmers invest time and resources to meet standards, and these add to cost considerably. Without knowing that the market is prepared to reward for additional efforts, farmers will not be motivated."

¹³ For local producers, this includes market support experts, aggregators, exporters, and middlemen.

This then may position the voluntary standards within this pineapple value chain as avenues for economic rents for the benefits of lead firms, retailers, and consumers. Where producers have been confident of price premiums, this has been infrequent – "there is no consistent access to a Fair Trade market. This depends on when the middlemen have an order".

A more in-depth evaluation of this market access leads the research to look at the extent of access, the power presented by this access, and local producers' position within these markets. The rhetoric of the market access enabled by certification holds that farmers have better access to market information and supporting credit. For local producers, farmer organising and unionisation remain central to the power dynamics in the market, and the access to relevant value chain information. Understanding the certification value chain's inherent governance system, examining the institutions and actors present, and their combined implications leads the research to proffer some policy recommendations.

4.4 Conclusion

This chapter centralized the research findings by presenting the qualitative data and analysing them to understand contextual realities. This study revealed that governance within the certified pineapple value chain in Ghana is captive, and the voluntary standards have assumed this captive governance. This has led to the permeation of arm's length market relationships between local producers and lead firms, where local producers face high switching costs. The research further studied the institutional context within which local value chain actors operate, based on the fact that voluntary standards are only as effective as the context within which they operate. It was evident that there is a standing institutional inefficiency, leading to an institutional void within the value chain. This institutional void, coupled with the captive governance present, has led to an absence of vertical upgrading opportunities, weakened social upgrading systems, and insufficient market access.

Chapter 5 Policy implications

5.1 Introduction

This chapter characterizes relevant policy areas for the development of the standards implementation system in the certified pineapple value chain in Ghana. It also presents the overall conclusion of the study. Legislation, policies, and regulations that promote general agricultural sector productivity are needed for value chain development. Within the certified pineapple value chain, these primarily exist. However, as outlined in earlier paragraphs, there are implementation challenges.

5.2 What is needed?

Value chain governance

Literature has established that value chain governance is fluid and depends on the dynamics of information and supplier capacity. With the right combination of indicators, the current captive governance system can transform to one more profitable – such as the modular governance system (see Table 2 below). Having established that voluntary standards accede to the value chain governance system present, a modular governance system will better support optimal outcomes for local producers.

 Table 2

 Dynamics of a potential modular governance structure

Determinants	Operational level
Complexity of transactions	High
Ability to codify transactions	High
Capabilities in the supply base	High

Source: Fieldwork, August 2020.

Within the modular governance system, there is a lower power asymmetry and a lower degree of explicit coordination. Similar to captive chains, suppliers in modular chains produce to market specifications (in this case, voluntary standards specifications). However, in modular chains, producers become fully responsible for the technology that drives production. This drives down switching costs, and producers can switch value chains when it no longer serves their purposes, thus reinforcing producer agency. The high ability to codify transactions and produce to market specifications means more efficient value chain interaction between actors. For this to happen, there needs to be an improvement

in supplier's capabilities (through institutional arrangements) and a more fluid information flow within the chain.

Information flow is vital for chain innovation, access to resources, and a better understanding of risks by local producers. The uni-lateral flow of information within the value chain, while useful for delivering information downstream, creates an information gap. To bridge this, it is critical to sustain the voice and representation of local producers, especially smallholder farmers, at all points within the value chain – policy and implementation. To ensure seamless, uninterrupted, and interconnected information system, the nationally mandated support agencies, as well as locally approved certification agencies need to align their activities with the needs and concerns of local producers. This will support the creation of the required feedback loops, and permit local producers to interact effectively with value chain actors on the one hand, and standards conveners on the other hand, creating lower power asymmetries within the chain. Institutions with obligations to the development of the value chain such as MoFA, Ghana Standards Authority, Ghana Export Promotion Authority and relevant civil society organisations need to act in concert to create strategies that promote feedback, accountability, transparency, representation, participation, responsiveness, and active inclusion of local producers. This repeated feedback loop will create more balanced bargaining relationships for local producers and support them migrate from arm's length to more modular types of market relationships.

To improve supplier efficiency, it is critical to involve local producers and labour in relevant valueadded training and skills development activities. This, coupled with feedback loops highlighted above, will ensure that support provided to local producers is targeted at their skills development needs, to support the increase in labour efficiency and promote overall supplier capacities.

Institutional efficiency - creating an enabling environment

It has been established that while there exists legislation and policy to support value chain operations, there is a gap in implementation due to institutional inefficiencies. These inefficiencies of the local political economy contribute to voluntary standards not delivering optimal benefits for local actors. To create an enabling environment that facilitates significant economic and social upgrading local producers, a persistent implementation of established policies by the institutions identified is required. The institutions that exist to provide support within this chain include the Ministry of Food and Ag-

riculture, the Ghana Standards Authority, Ghana Export Promotion Agency, and Sea-Freight Pineapple Exporters Ghana. Agricultural sector NGOs, academia and finance institutions also support the activities of these primary actors.

Increased State investments in logistical requirements such as improved road networks, availability of and easy access to packhouses, efficient service and cost delivery by the relevant export agencies will increase local producers' potential to improve production, increase incomes and eventually undertake functional upgrading. Creating an enabling environment for local producers will ultimately lead to increased bargaining power, better market access and orientation, and higher potential for the development of agricultural labour. Further investments in technological and product development are also crucial; investments in scientific research (soil, water, other input) and farm machinery can improve productivity to about 90,000 kg/ha¹⁴ as in Costa Rica¹⁵.

Regarding social upgrading, there is the need for a long-term political commitment, policy, and action architecture to protect labour in the broader agricultural sector. A guided national review of the larger labour reforms— to include comprehensive evaluations of the minimum wage, social protection instruments, worker voice and representation—will be useful to expose broken linkages, establish better coherence with the ILO decent work framework, and identify opportunities to strengthen those linkages. This will support the certified pineapple value chain provide better opportunities for more profitable agricultural activities for labour. To reach this goal, institutional coordination arrangements are essential to ensure enforcement, because of the level of informality of the agricultural sector in Ghana.

Horizontal coordination and partnerships

Reference has been made to the potency of clustering within local value chains (Gibbon 2001). These partnerships, which thrive on mutual trust, can be effectively developed between local producers at the same level of production and between actors in an ecosystem cluster (academia/research, technology, product development, finance, and marketing). Horizontal coordination is a known prerequisite for other forms of upgrading and bargaining, especially for smallholder farmers, yet it is currently limited. Thus, producers are better-off establishing stronger business ties with other producers to

¹⁴ SMP-18012 Costa Rica pineapple residue valorisation

¹⁵ Costa Rica exports 55% of all global fresh/pineapple export (UN, 2016)

leverage their collective performance efficiencies and make the most of the absence of efficient institutional systems. Economic power within the market is hinged on economies of scale, much of which local producers lack. Recognising this lack of economic power and the constraints faced against lead firms in the market, local producers can take advantage of this form of partnership to achieve economies of scale and reduce transaction costs by leveraging shared knowledge and competencies, technologies, and a singular voice on the international market.

Vertical upgrading / vertical coordination

To achieve this, local producers first need to maximize horizontal integration opportunities. Seeing that vertical coordination requires increased investment, the economic outcomes of the collective performance efficiencies from horizontal partnerships can then be leveraged by producers to acquire other value chain activities necessary for their work – for example, a packhouse. Interestingly, especially within Ghana's certified value chain, these horizontal partnerships can be leveraged to form joint vertical integration networks. For example, a group of horizontal partners can invest in packhouses, logistics, transport, and collective marketing. This can help local producers regain control of the supply chain and build the momentum required to initiate price bargaining and direct information flow. Purposive action, mutually reinforcing high-low relationships are essential for the success of any vertical integration moves.

Environmental management

While environmental management may not be a pressing issue within the local production context, the impacts of climate change are increasingly visible to farmers, and these have lasting implications for future agricultural productivity. Thus, environmental management principles need to be adapted to local production contexts. A consideration for ecological management is the valorisation of crop residue after harvesting or other agricultural waste management techniques¹⁶. When implemented, this can create extra income for local producers and contribute to the reduction of greenhouse gases.

Leveraging regional value chains – Africa Continental Free Trade Agreement

With the establishment of the Ekumfi Pineapple Processing Facility, most local producers are increasingly engaged in dual value chains – local and export market chains. This presents an opportunity to

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¹⁶ One interview respondent indicated losing several tons of pineapple (these were buried in the ground) as a result of no access to the market during COVID-19.

develop these value chains to leverage the broader African fresh fruits markets. With the expected operationalisation of the African Continental Free Trade Agreement¹⁷, producers will have access to "a market of 1.2 billion people, with a combined GDP of \$3 trillion, across the fifty-four (54) Member States of the AU" (Akufo-Addo 2020¹⁸). This opening can be leveraged with the right investments to create a profitable continental demand for the certified pineapples.

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¹⁷ When operationalised, the AfCFTA will constitute the largest free trade area in the world

¹⁸ Address delivered by the President of the Republic of Ghana at the Commissioning and formal handing over of the AfCFTA Secretariat building

Chapter 6 Conclusion

Studies on global value chains and production networks are abundant. However, there is not much focus on an integrated value chain and institutional analysis on Ghana's agricultural context - and less so on the certified pineapple value chain - which is important for assessing the development options available to local producers.

To answer the research question, 'to what extent does the adoption of voluntary standards impact local producers' participation in the global pineapple value chain?', I introduced the concept of voluntary standards and their mechanism of operation within the pineapple value chain in Ghana. I also introduced the Global Value Chain Governance and Institutional Analysis and Design theoretical frameworks, demonstrated their centrality to the topic and verified how these are represented within the pineapple value chain in Ghana.

By analyzing the elements of the value chain governance, the research revealed that governance within the certified pineapple value chain is captive; local producers are trapped in arm's length market relationships with lead firms and global retailers. This captive governance - attributable to the unilateral, top-down flow of market information, limited supplier capabilities and technology- limits knowledge transfer and eliminates feedback loops within the chain. The oscillating potential of value chain governance means that with an adjustment in the dynamics of the three governance indicators discussed, value chain governance may metamorphose for better or for worse. The research concludes that modular governance is more likely to deliver more positive outcomes to local producers, where information is multidirectional and supplier capacities are maximized. However, this is hinged on long-term political will to make the necessary investments. Following continuous investments in information transfer and supplier capabilities, there can well be a move toward market governance where the central tool for governance is price rather than a powerful lead firm.

As value chain analysis is better understood by context, I examined the institutional characteristics present within the certified value chain to understand the mechanism of operation of the voluntary standards. Findings from the research point to the fact that the efficiency of the institutional machinery within the value chain is low - in an ecosystem where national and regional policy are generally quiescent or remote from the global decision making arenas in the market. Coupled with the nature of voluntary standards, this has created a mystification around voluntary standards systems.

Additionally, I deduced the consequent implications of these dynamics for local producers. This research evinces that while local producers are engaged in product and process upgrading by means of voluntary standards, they are unable to capitalize vertical upgrading opportunities which are required for sustained economic development. This absence of significant vertical or functional upgrading, the research proves, is as a result of the absence of right market information, institutional void and dwindling supplier competencies within the supply base. The research shows that although local producers access the international market, the quality of this market access is unsatisfactory. For better market access and orientation, the research shows the need to improve information flow and supplier capabilities in order to improve local producers' bargaining power. Equally, social upgrading opportunities are limited for local producers and the labour they employ. The general arguments that contest a definite positive correlation between economic upgrading and social upgrading are buttressed by the observations in this certified value chain where the distinct impact of economic upgrading on wages and quality of jobs is not clear. Hence, the research disproves the assumption that economic upgrading within voluntary standards systems directly impact local producers' social upgrading opportunities. Instead, local political commitment and a robust and enforceable policy architecture may hold higher opportunities for social upgrading in the value chain.

In conclusion, the voluntary standards within the certified pineapple value chain have not delivered optimal impact for local producers who should be the primary target of standards' impact, rather than lead retailers who appropriate standards as an avenue to reduce risks, profile sustainable outcomes, and increase their consumer loyalty at the expense of local producers' real economic development. The research finally proposes some policy recommendations for micro, meso and macro-level adoption. These include investments in efficient, multidirectional information flow, increased institutional efficiency, development of horizontal and vertical partnerships, and leveraging the African Continental Free Trade Agreement.

During this research, I have conducted an empirical analysis of experiences of local producers with regards to certification in the pineapple sub-sector. Having established that standards assume the prevailing governance system within a value chain, an isolated examination of the governance typology framework does not explicitly indicate the position of standards and the relevance of other exogenous factors, for example labour. Recognising that labour is vital to value chain development, an integration – instead of separation - of this labour research in GVC research will be useful. I make two suggestions with regards to how further research can ably support this body of work.

First, a combination of the governance typology framework with other frameworks such as the IAD presents a critical lens to explore the more case-specific aspects of GVC analysis such as the position of labour, history of the value chain and the enablers of social upgrading. To do this, further empirical research which takes departure from local institutional contexts will be required. Secondly, a stimulating debate that emerged in the course of the research was revenue distribution which is dependent on the type of market access and orientation. While this is not discussed in particular detail in this research, it will be useful for future research to assess the trail of revenue and nodes of distribution and value-add within the certified pineapple value chain in Ghana. That will help to uncover if local producers are currently well-placed to derive equitable revenue from their participation in the certified value chain or if the implementation of the recommendations of this research will engender the required repositioning.

Value chains are constantly evolving and with this evolution comes a shift in the centre of production or an alteration in the convergence of power. On further reflections on the theories used for the study, the research finds that a relevant aspect of the GVC theory is its ability to frame or centre value chain development discourse on internal mechanisms and internal governance structures. This has proven useful in many cases. However, considering the neoliberal, near-polarized and political nature of international (agricultural) trade, there is an added value to considerations of the influence of occurrences of external to the chain. For instance, Brexit, the US-China trade wars and the onset of the AfCFTA are external situations that may have an impact (positive or negative) on the value chain development governance. To this end, there is a critical need to build on GVC framework and governance typology to assess how such externalities influence value chain governance structures.

Furthermore, wholesale views on economic and social upgrading miss the particularity of context. Consequently, existing theories often miss the dependency of connection between economic and social upgrading, especially for largely informal settings. An area of further research can originate from a more holistic, contextual understanding of the relevance of economic upgrading to social upgrading and an examination of whether standards offer opportunities for comprehensive labour development (both for measurable standards and enabling rights) in a way that is not driven solely by firm profitmaking.

Regarding how these theories may best be relevant to other value chain or voluntary standards studies, persistent efforts are required to situate the studies in context – to serve at least two of several purposes: to discount neoliberal development epistemologies and ignite localised academic studies

and policy action. Further, the role of lead firms is barely highlighted in the GVC governance framework although the governance spectrum positions lead retailers as responsible for developing the capabilities in their supply base. The current GVC governance theory shows that they evade this responsibility, yet with hardly any emphasis on the approaches to operationalize this lead-firm-responsibility. Considering that GVC analysis, from a governance perspective, helps to better understand how value is "created, captured, sustained and leveraged" (Gereffi 2016:27), this omitted responsibility may be seen as a weakness of the theory especially for a better understanding of captive governance systems such as witnessed in the certified pineapple value chain. Recognising that supplier capability is vital both to suppliers and to lead firms, this current governance framework will require some further theoretical adjustments or integrations that recognise lead firm role in supplier capability development in order to sustain value, and incentivise the full development of labour in a way that improves labour conditions and engenders labour voice and representation.

Appendices

Appendix 1Questionnaire

QUESTIONNAIRE FOR REP. OF MINISTRY OF FOOD AND AGRICULTURE

1.	What is the nature of the relationship between certified farmers and buyer(s) within the value				
	chains				
	☐ Formal contract ☐ verbal agreement				
	☐ Buyer dictates the terms ☐ equal rights relationship				
	☐ Farmer can easily find another buyer ☐ Farmers are bound to a particular buyer				
	☐ Farmers are satisfied with the outcomes of the certifications				
	☐ Farmers are satisfied with the outcomes of the certifications				
2.	Which activities do the certified farmers mainly engage in? please tick all that apply				
	□ production □ grading and sorting □ processing				
	□ exports □ aggregation				
3.	. What government policies/regulations currently benefit the pineapple value chain?				
4.	. What role does the ministry play within this global certification value chain?				
5.	What types of institutional support exists to support certified farmers to integrate into global				
	value chains? please tick all that apply				
	Type of support Organisation				
	production facilitation [example knowledge sharing, organizing transport, pooling volumes				
	infrastructure (such as storage facilities)				
	support with strategic decision making (example providing critical market information to farmers)				
	Other. Please describe				

6. Under what ideal governance structures will certifications systems optimally integrate local farmers into the global value chains?

QUESTIONNAIRE FOR FARMER-BASED ORGANISATION

- 1. How many pineapple farmers are in the organisation?
- 2. What is the average farm size of the pineapple farmers?
- 3. What do you think is the greatest challenge facing the pineapple sector generally?
- 4. What types of institutional support exists to support certified farmers within the organisation?
- 5. How has the certification led to any improvements for the farmers wit in the organisatio?
- 6. What constraints do farmers in the organisation typically face in signing up to the certification standards?
- 7. What structures and policies are needed to ensure that farmers are able to benefit profitably from certified agricultural value chains?

QUESTIONNAIRE FOR REP OF EXPORTERS ASSOCIATION

- 1. Please describe your role (in the value chain)
- 2. How do you get information for your export and market (e.g. market info, trends, requirements, etc)?
- 3. What are the main challenges in collaborating with buyers?

4.	What types of institutional support exists to support your work in the global value chain?
	☐ Training and development
	☐ Organizing transport
	☐ Pooling volumes
	□ other. Please describe

- 5. Do you undertake any processing prior to exporting (grading, sorting, cleaning, etc)
- 6. What volumes should a producer have to produce to be able to participate in the certified value chain conventional value chain?
- 7. In your opinion, how have certifications improved the volumes of export for the farmers?

QUESTIONNAIRE FOR FARM WORKERS

1. Are you a temporary or permanent worker?

2.	Do you currently have a signed contract with the employer?					
3.	Do you know about the certification standards that your firm has signed up to? □Yes					
	□No					
4.	Does the firm provide any information to the staff about the specifications of the certifica-					
	tion?					
5.	In your opinion, have conditions of employment improved since the company adopted these					
	certifications?					
6.	Please identify which of these health and safety measures are available to your employees:					
7.	\square safety gloves \square wellington boots \square cover-alls and pro-					
	tective body suits □ masks □ periodic training on health and safety precautions					
	□ other, please list					
8.	Do the workers within the firm have access to a health insurance scheme?					
9.	Are you (and the group of colleague workers) able to bargain for better wages?					
10.	How much is the cost of labour?					
11.	Does the firm fairly compensate for overtime?					
12.	Are these influenced by the certification requirements?					
13. Has the firm signed you or your colleagues up for the national social security?						
14.	Does the firm provide any training for the workers to support your work?					
15.	Has this in any way improved your capacity to carry out your duties?					
QUES'	TIONNAIRE FOR CERTIFICATION AUDITOR					
1.	Type of certification:					
2.	What are the requirements of this certification?					
3.	Are these requirements adapted to the local context? \square Yes \square No					
4.	Please explain					
5.	Do these specifications change regularly according to new market trends and developments?					
6.	□ Yes □ No					
7.	What forms of auditing support is available to certified farmers?					
8.	How is information about the auditing requirements circulated within the value chain?					
9.	Who is involved in disseminating this information? (Interviewer to probe further on hierar-					
	chy of dissemination. Example global certification body>regional body>national body>local					
	agent?)					

	10.). Who determines the final quality of produce for export?				
	11.	1. How is this inspection performed?				
	12.	□ inspection on delivery □ little or no inspection on delivery				
QU	ES'	TIONNAIRE FOR CERTIFICATION AGENCY				
	1.	. What are the requirements of this certification?				
	2.	Are these adapted to the local context? \square Yes \square No				
	3. Do the specifications undergo regular updates following new market trends and d					
		ments?				
		□ Yes □ No				
	4.	How does this impact the activity of the farmers?				
	5.	What certification options are available to encourage farmers to certify?				
	6.	What forms of support is available to certified farmers?				
	7.	How is information about the certification circulated within the value chain? (example from				
		buyers to farmers, from certification inventors to farmers, from certification agents to farm-				
		ers)				
	8.	In what ways is information about the specifications for production presented to the certi-				
		fied farmers?				
	9.	Who is involved in disseminating this information? (Interviewer to probe further on hierar-				
		chy of dissemination. Example global certification body>regional body>national body>local				
		agent?)				
	10.	Is there a system to regulate price within the certified value chains?				
	11.	Which of the following support is available to improve the work of the certified farmers?				
		☐ Technical assistance ☐ Credit ☐ Technology, machinery				
		\square Identification of buyers and contracts \square None of the above				
	12.	Which of these do farmers most commonly undertake after adoption of the certification				
		standards? Please tick all that apply				
		Joint purchasing of production inputs				
		Joint use of production facilities				
		Joint marketing of products				

	Other, please describe			
17	. What are the business outcomes of these activities?			
18	What are the cost implications of certification?			
	1			
OHES	STIONNAIRE FOR CERTIFIED FARMERS			
-	Age (years)			
	\square less than 30 \square 31 - 50 \square 11-15 years \square 16-20 years \square 21 years and more			
2.	Size of farm (ha)			
	□ 1-50 □ 51-100 □ Over 100			
3.	Educational level:			
4.	Which of the following certifications are you signed on to? Please tick all that apply			
	☐ Global GAP ☐ Fair Trade ☐ Organic			
	☐ Other Please list			
5.	Which category of certification do you belong to?			
	☐ Group certification ☐ Individual certification			
	☐ Other			
6.	How long have you been signed to the certification?			
	\square 1-5years \square 6-10years \square 11-15years \square 16-20years \square 21years and more			
7.	What was/were your main reason(s) to adopt the certification?"			
	☐ Expectation of obtaining production and farm management improvements			
	☐ Better prices			
	☐ Increased client demand			
	☐ Increased market access			
	☐ Competitive advantage Other			
8.	In your opinion, what are the 3 main benefits the certification has brought to your farm?			
	☐ Production and farm management improvements			
	☐ Better product quality			
	☐ Better prices			
	☐ Increased client demand			
	☐ Increased market access / new markets			

	☐ Improvement in working con	ditions			
	☐ Competitive advantage				
	☐ Other				
9.	Which of the below groups prov	vide support to y	ou as a certifi	ed farmer? <i>Please tick</i>	
	Ministry of Food and	Agriculture			
	Exporter				
	Certification agency				
	Other firms				
10.	Does the support meet your nee	ds?			
	☐ Yes ☐No				
	a. If no, what kind of support w	vill be beneficial	to your work?		
11			•		
11.	Have the certifications contribut			еаѕе иск ан шат аррту	
	Improvement in gener	ral agricultural p	ractices		
	Improved yield				
	Better prices				
	Reduced cost of production				
	Improved access to ce	ertified buyers			
12.	Which markets do you sell your	products to? Tie	ck all that appl	ly	
		Certified	Non-	\neg	
			certified		
	Local (national)				
	Regional (West African,				
	other African countries)			_	
	Export (Europe)				
13.	Are there any challenges with ma	aintaining the ce	ertification?		
	□ Yes □ No	0			
11	How will you describe those cha	Cappaell			
	·	O		(:	
13.	Does the mix of these value cha	ins and their req	uirements imp	pact (or improve) your work?	
	☐ Yes ☐ No				
	Please explain				
16.	What is the best source of inform	nation within th	e value chain?	Please tick	

	Ministry of Food and Agriculture			
	Exporter			
	Certification agency			
	Auditing agency			
	Other farms			
17.	Are you able to implement the information received?			
18.	Are you able to sell all your produce after harvest?			
	What is the length of relationship with your buyers?			
	What types of support do your buyers provide?			
	☐ Information on specifications and volumes			
	☐ Training on good agricultural practices			
	☐ Other. Please describe			
21.	Who determines the prices of your produce?			
	☐ Farmer ☐ Buyer ☐ Open negotiation ☐ Other sources.			
	Please list			
22.	Is there an organized union of pineapple farmers in the value chain? ☐ Yes ☐ No			
23.	Are the union's activities influenced, promoted or managed by the certification bodies or			
	representative agencies?			
	□ Yes □ No			
24.	Which type of labour do you use on the farm?			
	☐ Family labour ☐ Hired labour			
25.	Please identify which of these health and safety measures are available to your employees:			
	☐ Safety gloves ☐ Wellington boots ☐ Cover-alls and protective			
	body suits ☐ Masks ☐ Periodic training on health and safety precautions			
	☐ Other, please list			
26. Are these influenced by the certification requirements? \square Yes \square No				
UES'	I'IONNAIRE FOR COMMERCIAL FARM			
1.	Size of farm (ha)			
2.	Which of the following certifications are you signed on to? Please tick all that apply			

□Organic

□Fair Trade

□Global GAP

	□Other Please list	
3.	How long have you been signed to the certification?	
	□ 1-5years □ 6-10years □ 11-15years □ 16-20years □ 21years and more	
4.	In your opinion, what are the 3 main benefits the certification has brought to your farm?	
	☐ Production and farm management improvements	
	☐ Better product quality	
	☐ Better prices ☐ Increased client demand	
	☐ Increased market access / new markets	
	☐ Competitive advantage	
	□Other	
5.	How many workers does your firm employ?	
	a. Male =	
	b. Female =	
6.	Have you signed a contract with them, which specifies the responsibilities of both sides	
	□ Yes □No	
7.	Do your workers have a (formalized) union?	
	□ Yes □No	
8.	What is the cost of labour for the different activities? (Land clearing, Planting, Weed cont	rol
	Harvesting?)	
9.	Are the farm wages stipulated/influenced by the certification? ☐ Yes ☐ No	
10.	. Do the workers receive any periodic training to develop their work? \Box Yes \Box N	О
	Is this influenced by the standards? \square Yes \square No	
11.	. Please identify which of these health and safety measures are available to your employees:	
	☐ Working gloves ☐ wellington boots ☐ cover-alls and protective body suits	
	☐ Masks ☐ periodic training on health and safety precautions	
	☐ Other, please list	
12.	. Are these influenced by the certification requirements? \square Yes	
13.	. Please identify which of these activities you have engaged in since adopting the certification	on
	Exporting (firm also became an ex-	
	porter)	
	Processing Institution of out-grower scheme 14. How are the out-growers selected?	
	Institution of out-grower scheme 14. How are the out-growers selected?	

- 15. Who determines the price of the produce bought from the out-growers?
- 16. Are there any measures in place to check that the out-growers abide by the certification regulations of the firm?

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