The Embeddedness of Global Value Chains

Institutions and Value Chain Restructuring in the Cashew Industries of India and Ivory Coast

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List of abbreviations

ACA African Cashew Alliance
ACi African Cashew initiative

ARECA Autorité de Régulation du Coton et de l'Anacarde

BRC British Retail Consortium

CAPEX Kerala State Cashew Workers Apex Industrial Co-Operative Society

CCA Conseil du Coton et de l'Anacarde
CCI Cashew Corporation of India

CEPCI Cashew Export Promotion Council of India
DFID Department for International Development

FDA US Food and Drug Administration

SFMS Special Focus Market Scheme

FCFA Franc Communauté Financière Africaine

FMS Focus Market Scheme

FOB Free On Board

FSMA Food Safety and Modernization Act FSSC Food Safety System Certification

GCC Global Commodity Chains

GIC-CI Groupement des industriels du Cajou en Côte d'Ivoire
GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

GPN Global Production Networks

GVC Global Value Chain

HACCP Hazard Analysis and Critical Control Points

HCMUT Technical University of Ho Chi Minh

ISO International Organization for Standardization
KSCDC Kerala State Cashew Development Corporation

MNC Multinational Corporations

MoU Memorandum of Understanding

NAFTA North American Free Trade Agreement

NIE New Institutional Economics

RCN Raw Cashew Nut

RDT Resource Dependence Theory

SCP Structure-Conduct-Performance Approach

SIETTA Salon International des Equipements et des Technologies de Transformation de l'Anacarde

SOVANORD Société de Valorisation de l'Anacarde du Nord

USAID United States Agency for International Development

USD US Dollar

VINACAS Vietnamese Cashew Association

VKGUY Special Agriculture and Village Industry Scheme

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Behold the humble cashew nut. Turns out it isn't so humble, or even a nut.

Dangling from the bottom of the cashew apple, a rare example of a seed that grows outside its own fruit, the cashew embodies globalization—and some of its discontents.

(Spindle and Agrawal 2017)

Chapter 1: Introduction

The production, trade and consumption of agricultural commodities are in a constant state of flux. Agro-food industries are subject to shifting dietary preferences, technological advances and institutional changes, leading to geographical and organisational restructuring processes on an increasingly global scale (Goodman and Watts 1997). The growing mobility of finance, expanding reach of trade relations, as well as foreign direct investment into processing, retail, and food services have accelerated the global relocation of manufacturing activities and sites of agricultural production (Reardon and Timmer 2007). Additional impetus has been gained from structural adjustment and trade liberalisation policies that have dismantled many of the institutions that previously took an active role in arranging sales and stabilising commodity prices (McMichael 1994). In many sectors, these restructuring processes have reinforced coreperiphery relations in which the Global South supplies raw material and low skill labour for the consumption of high value products in advanced economies (Berndt 2018; Fröbel et al. 1978; Dicken 2007; Raynolds 1994). As Massey argues, new spatial divisions of labour entail "whole new sets of relations between activities in different places, new spatial patterns of organisation, new dimensions of inequality and new relations of dominance and dependence. Each new spatial division of labour represents a real, and thorough spatial restructuring" (Massey 1984: 8). The organisational implications of spatial restructuring are inherent to the globalisation of food production. As a growing share of agricultural production provides inputs for food manufacturing in distant places, firms have to find ways to coordinate their supply chains on a global scale (Marsden and Arce 1995). This has led to an increasing proliferation of private industry standards, but also to new forms of contract arrangements, inter-firm collaborations or vertical integration across national borders (Schmitz 2004; Swinnen 2007).

The cashew industry represents a case in point. Since the first commercialisation of cashew nuts, the sites of cashew production, processing, and end consumption have experienced major territorial and organisational shifts within and between countries and continents. After

Portuguese traders introduced the cashew tree from Brazil to East Africa and Asia in the 16th century, India first started processing cashew nuts into edible kernels during the 1920s, catering primarily to US consumers. When cashews became popular in Western end markets as healthy snacks and later as a substitute for dairy products, they were considered a 'poor man's crop' and 'rich man's food'. However, owing to a growing middle class with a particular demand for cashews as an ingredient for cakes and sweets, India recently became the world's largest consumer of cashew kernels. With growing global and domestic demand, cashew processing in India increased rapidly, making the city of Kollam in the Southwestern state of Kerala the 'cashew capital' of the world, with a global market share of almost 90 per cent during the 1960s (Veron et al. 2004). As the rapidly growing cashew industry soon experienced supply shortages of raw cashew nuts (RCN), Indian processors increasingly started to import RCN from Africa—first from East African producers and increasingly from West Africa, particularly Ivory Coast.

As of the 1990s, India no longer dominates RCN trade and cashew kernel exports. Vietnam, spurred by investments in automated processing technologies, overtook it in 2006 as the world's largest exporter of cashew kernels. More recently, many African countries reemerged as major RCN producers and initiated support schemes and policy measures to boost their domestic processing industries. After decades of stagnating RCN production volumes and failed industrialisation attempts, Ivory Coast became the world's biggest producer and exporter of RCN in 2015, claiming an estimated 21 percent of the world's total production, worth over USD 650 million (World Bank 2016). At the same time, local entrepreneurs and foreign direct investment doubled the installed cashew processing capacity in Ivory Coast between 2013 and 2015. With a declared target of keeping the entire cashew production process domestic by 2020, Ivory Coast has the potential to become the next global processing centre.

Making sense of how and why global industries restructure has become a key task for scholars from various disciplines, including geography, sociology and economics. At the same time, the ongoing global integration of production, trade and financial flows has complicated the task of finding appropriate analytical tools for doing so (Sturgeon et al. 2008). Since the 1990s, chain and network approaches¹ have gained favour in analysing the market linkages that underlie the organisation and reorganisation of industries, and for understanding the drivers and developmental prospects associated with the globalisation of economic activities. Central to this strand of research is the observation that local-global linkages are often characterised by

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¹ While the analytical focus of this study shares similarities with the Global Production Network (GPN) approach, it utilizes a Global Value Chain (GVC) terminology as this strand advanced the concepts of governance and upgrading in most detail, particularly with regard to the agricultural sector.

complex intra-industry relations which play a crucial role in determining whether suppliers can improve their position in the global economy. From this perspective, both the economic and social incentives for agro-food businesses to integrate in global markets (related to value capture and organisational learning) as well as their drawbacks (such as disinvestments and downward pressures on wages or working conditions) depend to a large extent on the strategic decisions of dominant actors, so called 'lead firms', that coordinate production activities beyond their own organisational confines.

However, with an emphasis on firm-level actors, this strand of research has tended to obscure other dimensions which affect the creation and maintenance of global industries, particularly the impact of state institutions at the regional and national level. Various scholars have emphasised that this is problematic. On the one hand, the institutional environment may provide crucial resources that allow firms to upgrade, such as knowledge, technologies, loans, or subsidies. On the other hand, institutions such as state legislations and industrial policies determine to a large extent how firms interact with each other and thereby shape resulting forms of industry organisation. Hence, Bair (2005) states that a "next generation of commodity chain research should expand the scope of analysis to encompass the regulatory mechanisms, market institutions and structural properties of contemporary capitalism that affect the configuration and operation of these chains" (Bair 2005: 171). Following repeated calls for such an endeavour, a number of studies have started to investigate how inter-firm linkages materialise in response to institutional pressures (Lane 2008; Mayer and Phillips 2017; Peters 2008; Raikes et al. 2000; Selwyn 2008; Thomsen 2007). While this has helped us to understand the importance of domestic legislations, trade agreements, and industrial policies for the construction and functioning of value chains, this body of literature provides little theorisation of how value chain actors and institutions interact with each other (Smith 2015).

1.1 The target of the dissertation

This study attempts to contribute to a better understanding of how institutions at various scales shape the construction and restructuring of market linkages that form global value chains. For this purpose, I study the restructuring of the global cashew industry, with a particular focus on RCN production in Ivory Coast and cashew processing in India. As the trajectory of a cashew nut comprises a wide range of globally dispersed, labour intensive activities, the cashew value chain is embedded in a multi-scalar web of institutions bound to particular geographies. This research focuses on the intersection of institutions and economic actors at different levels of the cashew value chain to achieve two overall targets.

First, the study illuminates the institutional drivers of value chain restructuring in the cashew industries of India and Ivory Coast. Acknowledging that GVCs do not exist in a vacuum but remain embedded in geographically specific institutional settings, this study places a particular focus on the role of institutions at the state and sub-state level in shaping the geography and organisational structure of production, processing and trade of cashew nuts.

Second, this study develops general propositions about the relationship between the strategic behaviour of value chain actors and pressures arising from their institutional environment. For this purpose, I draw on Neilson and Pritchard's (2009) 'institutionally enriched GVC approach' which depicts value chain dynamics and place-based institutions as being negotiated within a series of 'value chain struggles'. However, while their framework allows scholars to link local institutional arrangements to the 'macro' structures of transnational food networks, it offers limited theoretical insights into different strategic responses that actors employ in response to institutional pressures. Hence, this study attempts to refine our understanding of the interaction between value chain actors and their institutional environment. By doing so, this study attempts to answer the research question:

How did the geography and organisation of the cashew industries in India and Ivory Coast evolve, and how can the restructuring be explained?

This guiding question will be addressed in several steps. I start by investigating how changing institutional contexts and industrial policies in India and Ivory Coast have shaped the governance structure and upgrading opportunities along the cashew value chain. Furthermore, I will investigate the impact of food safety regulations in Northern end markets on the organisation of the cashew industry in exporting economies. These issues will be addressed through the lens of an 'institutionally enriched GVC approach', as introduced by Neilson and Pritchard (2009), which links the agency of value chain actors with pressures exerted by their institutional environment. Out of the interplay between firm strategies and institutional pressures, it is argued, emerge the drivers and developmental prospects associated with the globalisation of local economic activities.

1.2 The structure of the dissertation

Following this introduction, *chapter two* traces the development of the GVC framework against the background of a wider academic debate on agro-industrial restructuring which developed from structuralist concerns about agricultural market organisation towards an actor-centred approach to understanding agro-industrial restructuring. A focus is placed on value chain

'governance' and 'upgrading', which represent the main concepts for GVC scholars to investigate dynamics of global economic organisation.

Chapter three highlights the need for a context-sensitive approach to the study of value chain dynamics and theorizes the relationship between institutional pressures and GVC dynamics. In doing so, it integrates Oliver's (1991) typology of 'strategic responses to institutional pressures' into Neilson and Pritchard's (2009) 'institutionally enriched GVC approach'. This allows to incorporate institutional pressures and interest-seeking agency of economic actors into the analysis of global industrial restructuring.

Chapter four to seven present the empirical findings of the study. The chapters consist of four research articles which have been finalised during the course of the dissertation². Each article addresses the role of the institutional context in shaping the organisation of the cashew value chain. While this topic extends through all articles, it does so from various angles and geographical perspectives, at four different nodes of the value chain: (1) RCN trade between Ivory Coast and India; (2) the organisation of cashew processing in Southern India; (3) the development of the processing industry in Ivory Coast; (4) the impact of Northern food safety standards on cashew processing in India.

Chapter eight summarises the findings and reflects on the explanatory power of an institutionally enriched GVC approach to understand the evolution of global industries. Finally, I discuss general lessons which can be drawn from the case of the cashew industry for studying the restructuring of global agro-food systems.

1.3 Research design and methodology

This study employs a qualitative research design. This approach is most suitable to gain an indepth understanding of contemporary and complex phenomena, particularly if the boundaries between the units of analysis and their context are not clear (Yin 2009). The present study represents such a case as the main objects of inquiry-the 'institutional environment' and 'value chain stakeholders'-are neither sharply distinguishable nor mutually exclusive. This is best exemplified by private sector representatives which hold executive positions in public organisations, as is the case for the Cashew Export Promotion Council of India (CEPCI), which offers a number of services and publicly funded support measures to Indian cashew businesses.

² Three of the articles have been published in international peer-reviewed journals at the time of submitting this dissertation. The chapters four, six and seven have been finalized as single-authored articles. Chapter five, "Loose coordination and relocation in a South-South value chain: cashew in Southern India and Ivory Coast", has been published as a co-authored article with Martina Fuchs. The empirical findings of this chapter are solely based on field work conducted by the author of this dissertation.

Furthermore, Indian state agencies are also directly involved in cashew processing. For example, the Kerala State Cashew Workers Apex Industrial Co-Operative Society (CAPEX) runs 10 factories with more than 5000 employees.

Data collection

Empirical evidence was drawn from 117 interviews conducted during fieldwork in India and Ivory Coast between 2014 and 2017. The fieldwork periods comprised three visits: the first between April and August 2014 in India, the second from May until June 2015 in Ivory Coast and the third from November to December 2017 in India. Research sites were chosen in accordance with their importance in the industry. Ivory Coast is the world's biggest producer and exporter of RCN. Cashew cultivation is concentrated primarily in the Northern part of the country, where a growing number of processing plants have been installed over the last years.

India represents the world's processing centre for cashew kernels, catering to domestic and international markets alike. In particular, the Southern states of Kerala and Tamil Nadu have a long and interconnected history in cashew processing and kernel exports. Due to the widespread prevalence of unlicensed cottage processing units (kudivarappu), any statistical data on the Indian cashew industry must be treated with some caution. However, a study of the Giri National Labour Institute estimates the number of cashew factories in Kerala to 800 (NLI 2014). The neighbour district of Kanyakumari, in the state of Tamil Nadu, is estimated to host more than 400 factories (Sivasankaran and Sivanesan 2013). These areas represent the main research sites. Apart from methodological considerations, practical concerns such as language, financial constraints and accessibility of sites also played a role in selecting the cases.

Interview partners comprised personnel of cashew processing factories, including executive staff and factory managers, cashew farmers, policy makers, support agencies, cashew traders and brokers, as well as representatives of labour unions. Table 1 gives an overview of interview partners in both countries. However, because processors are often also engaged in trading RCN, value chain actors are not always clearly distinguishable.

During conversations, I utilised interview guidelines designed to elicit information on the evolution of business operations, the types of forward and backward linkages in the value chain, and the importance of external institutions for the functioning of the value chain. The guideline was adjusted after initial pilot interviews. Identification of institutions that have bearing on the organisation of value chain activities followed an exploratory approach. Open questions were specifically designed to illuminate the involvement of state agencies, industry associations and NGOs along the Indo-Ivorian cashew value chain.

Type of interview poutper	Number of interviews by country		
Type of interview partner	India	Ivory Coast	
Processor	57	19	
Trader	2	16	
Broker	3	-	
Farmers and farmer organisations	-	9	
Government body	5	3	
Support agency	1	1	
Labour Union	1	-	
Total	69	48	

Primary data was complemented by secondary sources, such as industry reports and policy documents, provided by the Cashew Export Promotion Council of India (CEPCI), the African Cashew initiative (ACi) and the Ivorian Cotton and Cashew Council (CCA). Many interviews in India and Ivory Coast were combined with factory visits, allowing to gain insights into the physical process of cashew processing.

Data analysis

If permission was given, interviews were recorded and partially transcribed, skipping irrelevant parts of the conversation. In order to specify the empirically observed pattern and filter relevant data from collected material, I utilised Mayring's methodology of qualitative content analysis (Mayring 2000). The development of categories specifies which parts of the collected material inferences are made. This allows to organise, examine and process extracted data systematically and ensures that the analysis remains reproducible.

Categories for various types of institutions initially followed Gereffi and Mayer's (2006) taxonomy of market governance, which the authors divide into three modes: facilitative, regulatory and distributive. However, these categories remained open for revision and evolved during the course of the study. Intermediate results of my study were triangulated with industry experts, business reports and newspaper articles.

Limitations

The cashew industry is characterised by a lack of trust and long-term obligations, which fosters suspicion between industry representatives as well as towards researchers. In this regard, prior work experience of the author and contacts in the African cashew industry helped to overcome barriers related to respondents' willingness to share information. Particularly the African

Cashew initiative (ACi) has been pivotal in providing contacts to public and private industry stakeholders. I also benefited tremendously from organisational support provided by the Ivorian Cotton and Cashew Council, which had sent a letter of introduction on my behalf to Ivorian cashew processors and traders. In India, my engagement as a visiting scholar at the Tamil Nadu Agricultural University has helped to gain trust and legitimacy.

Chapter 2: Drivers of agro-industrial restructuring

Multiple academic fields have examined the underlying determinants of global agro-industrial restructuring. While proving instrumental in comprehending agrarian restructuring against the background of wider systemic forces, early analytical frameworks have been criticised for their deterministic view on economic behaviour. Subsequently, calls for a relational perspective on globalisation processes have placed the global value chain (GVC) approach in the foreground, allowing scholars to analyse the interrelated influence of macro-level governance and micro-level upgrading on the restructuring of global industries.

Among the most popular strands of early agrarian studies are industrial organisation approaches and research on the international political economy of agriculture (Goodman 1997). The former has been popularised by the work of institutional economists, who began investigating the restructuring of agro-food industries primarily as a matter of 'market structure' (Cook 1959). With reference to Bain (1959), market structure is understood as those characteristics of a market which influence the nature of competition and prices, comprising the degree of market concentration, the degree of product differentiation and conditions for market entry (Clodius and Mueller 1961). A causal link is assumed between these market characteristics and firm behaviour, which in turn determines the performance of agricultural industries (Viaene and Gellynck 1995). For more than two decades, this structure-conduct-performance (SCP) approach has been the dominant paradigm among scholars of industrial organisation in agriculture (Sexton and Lavoie 2001).

In a similar vein, rural sociologists working on 'food regimes' locate the determinants of agricultural market organisation in the 'rule-governed structure' underlying the production, trade and consumption of food (Friedmann 1993). In contrast to institutional economists who have largely excluded anything 'external' to the market (such as national policies) from their analysis, the 'new rural sociology' that emerged in the 1970s was strongly rooted in the international political economy (McMichael and Buttel 1990). Following the seminal work of Friedmann and McMichael (1989), studies of food regimes arguably became "one of the most durable perspectives in agrarian studies since the late 1980s" (Buttel 2001). Much of this literature adopts the general logics of capitalist accumulation as a vantage point for identifying the transitions between historical periods of relatively stable agricultural organisation (McMichael and Myhre 1992). The first food regime, it is argued, was based on exports of staple food from settler states to European end markets (1870s-1930s), whereas the second

regime (1950s-1970s) shifted towards deeper integration of agricultural production into the industrial sector accompanied by the rise of agro-food chains across national borders. As McMichael and Buttel (1990) point out, during this period agricultural products developed from final use products to specialised components of global agro-food industries. Thereby, agriculture lost its distinctive sectoral identity and became integrated into circuits of industrial capital (ibid.). There are ongoing debates as to whether the late 1980s marked the transition towards a third food regime that developed against the background of economic liberalisation and privatisation. Arguably, this period is characterised by a growing dominance of global agribusinesses which need to be responsive towards increasingly differentiated customer demands, including ecological concerns and health issues, giving rise to new forms of private global regulation (Bernstein 2016; Friedmann 1993). Being strongly influenced by regulation theory, concepts of 'Fordism' and 'post-Fordism' provide central references in this field to study the restructuring of agricultural industries between different food regimes (Kim and Curry 1993).

Despite drawing from divergent theoretical traditions, early agrarian studies share a top-down perspective on economic agency as being largely pre-defined by the structural properties of agricultural markets and the systemic logic of capitalism (Goodman and Watts 1994; Harriss-White 1999). However, the abstraction from sectoral specificities and economic agency leaves little space for explaining organisational heterogeneity and new forms of uneven development which have been widely associated with the globalisation of agro-food industries. This is why more recent agro-food studies have increasingly refrained from applying structuralist conceptions, instead calling for new approaches to theorising the globalisation of agro-food industries (Hart 1993). In particular, scholars have maintained that such an agenda should seek to give voice to local actors at the 'micro' level and the ways they are linked to the 'macro' structures of transnational food networks (Marsden and Arce 1995).

These considerations triggered a second generation of agro-food research during the 1990s, which started analysing the shifting geographies and organisational restructuring of agricultural sectors predominantly as a relational phenomenon. A 'relational perspective' on globalisation processes contends that the economic landscape is an outcome of the ways that economic agents interact with each other, involving local capabilities 'in-here' with external influences 'out-there' (Amin 1997). Hence, this second wave of agro-food research focuses particularly on the linkages and coordination mechanisms between different segments of agricultural industries (Reardon and Timmer 2012). While having their origins in diverse theoretical traditions, these studies share a common orientation in being "less deterministic, more nuanced, and more anchored in empirical research" (Buttel 2001: 177). One major strand of this literature represents the research into GVCs³.

2.1 The global value chain framework

Since the 1990s, the GVC framework has become a popular approach for analysing the relationships between the production, circulation and consumption of commodities which underlie the organisation and re-organisation of global industries. In particular, the GVC framework has allowed scholars to consider global industrial restructuring through the lens of complex intra-industry and intra-firm relations, highlighting power asymmetries between local firms and their global buyers.

The intellectual roots of the GVC approach extend to world-system scholarship developed by Hopkins and Wallerstein (1977) with an aim of understanding global economic structures in terms of a worldwide division of labour which divides the world into core countries, semi-periphery countries, and the periphery countries. In its initial conceptualisation, a commodity chain was meant as a tool for analysing the expansion and contraction of this division of labour which underlies a hierarchical and stratified world-system. Gary Gereffi (1994) popularised the 'global commodity chain' (GCC) concept and its later variant, the 'global value chain' (GVC), among a wider academic community devoted to understanding the drivers and development implications of specific value chains, most commonly defined as the entire range of activities involved in the life cycle of a product.

Despite having its intellectual origins in world-system theory, GVC analysis departs from the historical and holistic analysis of world-system scholars and places primary interest in the micro-level activity of the firm as well as the organisation and coordination of inter-firm relations along particular value chains (Bair 2005). It thereby takes an actor-centred approach to understand global economic restructuring (Lee 2010). This analytical focus has allowed scholars to bridge two epistemological divides.

The first relates to a disciplinary bridge between research on economic development in the Global South and the Global North (Hess 2009). Owing to its conceptual roots in worldsystem scholarship, one of the primary preoccupations of GVC research is to investigate the connections between commodity production in 'peripheral' regions and consumption in the

³ The GVC framework is only one among many approaches since the 1990s which utilise a chain- or network heuristic for understanding global economic dynamics. Related frameworks include global commodity chains (Gereffi 1994), international production networks (Borrus et al. 2000), global production networks (Henderson et al. 2002), the filière framework (Raikes et al. 2000) and research on cross-continental food chains (Fold and Pritchard 2005). In order to integrate these different, but related, perspectives some scholars suggested the 'global value chain' framework as a common terminology (Bair 2005).

'core' of the world economy (Hughes and Reimer 2004). A key insight is that these regions are often connected through complex intra-industry and intra-firm relations that go beyond marketbased transactions (Gwynne 2008). These relationships feature varying degrees of power asymmetries, allowing dominant actors to exert considerable influence over the operations of their suppliers. For example, investment decisions and sourcing strategies by 'lead firms' in the core economies have a direct impact on the integration of peripheral countries and firms into the global economy. Therefore, strategic decisions of lead firms directly impact on the industrial performance and development prospects in areas where their value chain 'touches down', including distant regions in the Global South. Hence, the GVC literature has contributed significantly to revealing power asymmetries and the mechanisms through which power is exerted along North-South value chains.

Secondly, chain and network approaches overcome deterministic assumptions deduced from the structural properties of markets or macro-historical developments. Despite highlighting the powerful position of global lead firms in shaping the development prospects of local firms, GVC analysis acknowledges the ability of local firms to relocate their own position vis-à-vis their buyers, thereby altering the way global production is organised. Hence chain and network heuristics provide an "alternative analytical path between the methodological individualism of narrowly firm-centric approaches [...] and the strong sense of structural determinism that is evident in studies of geographical industrialization" (Yeung 2005). Thereby, chain and network approaches have made considerable progress in bridging the dialectical relationship between structure and agency (Hess 2008). The interconnectedness of the 'macro' and 'micro' level has been widely explored through the lenses of two concepts: GVC governance and upgrading.

2.2 The governance of global value chains

Since the inception of the value chain framework, GVC scholars have concentrated overwhelmingly on the role of global lead firms in setting the terms under which other actors in the value chain operate, a practice widely referred to as GVC governance (Dicken et al. 2001). Originally focusing on the overall structural pattern of the value chain, scholars expanded their scope of view to include different forms of inter-firm relations within the chain itself. What combines all governance concepts is an understanding that the governance pattern of GVCs, related power relations, and the division of labour along GVCs is determined by factors which lie within the value chain itself.

In its initial conception, value chain governance referred to the "authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain" (Gereffi 1994: 97). Here, the governance of a value chain results from the strategic attempt of lead firms to gain organisational flexibility while wishing to remain in charge of the terms under which their suppliers operate. Their ability to achieve this is primarily linked to financial resources (purchasing power) and technical capabilities (competence power), which lead firms might leverage in a coercive way (Sturgeon 2009).

Gereffi (1994) distinguished between two ideal types of GVC governance structures. Buyer-driven chains are characterised by powerful supermarkets, retailers or branded manufacturers which specialise in product development, design and marketing while relying on a decentralised production network in exporting countries. Arguably, this governance type is most evident in labour-intensive industries, including the agro-food sector. By contrast, producer-driven chains are primarily found in capital intensive sectors where transnational manufacturers carry out a substantial part of production in-house, such as in the automotive industry. While both buyers and suppliers may be capable of controlling economic activities beyond their own organisational confines, Gereffi (1994) contends that globalisation has led to increasing power in the hands of buyers, thereby inducing a shift from producer-driven to buyer-driven value chains.

The dichotomy of producer- versus buyer-driven chains soon became criticised as overly simplistic, hardly resembling the variety of existing economic networks in the global economy (Dicken et al. 2001; Henderson et al. 2002; Ponte 2002). To address this weakness, scholars extended the forms of GVC governance by including 'trader-driven' value chains (Gibbon 2001), 'internet-oriented chains' (Gereffi 2001) and 'bi-polar' value chains (Fold 2002). Consequently, Gereffi and colleagues (Gereffi et al. 2005) re-conceptualised the initial governance dichotomy by drawing on three variables which the authors identify as the main determinants of different governance patterns: (1) the complexity of inter-firm transactions, (2) the ability to codify these transactions, and (3) the capabilities of suppliers in relation to these transactions. This led to five governance types set on a continuum where markets (competition) and hierarchies (vertically integrated firms) are set on opposite ends: In *market* relationships, the price represents the central mechanism for resource allocation along the value chain. Costs of switching to a new trading partner are low. In *modular* value chains, suppliers produce goods specified by a customer, whereas the codification of specifications remains relatively easy. Relational governance is characterised by complex product specifications which require frequent transactions between buyer and supplier, leading to mutual dependence. In captive value chains, suppliers depend on one or a few large buyers, involving high power asymmetries. Hierarchy as a form of governance describes vertically integrated value chains, in which headquarters exercise managerial control over subsidiaries.

In contrast to the first dichotomy, this conceptualisation no longer classifies the overall governance pattern of a value chain but instead investigates inter-firm relationships at specific nodes of a value chain. It does not diverge from the proposition, however, that the governance pattern of a value chain derives from the internal actors and characteristics of the value chain itself.

2.3 Upgrading primary production

While GVC governance provides us with a top-down approach for understanding the coordinating mechanisms between globally dispersed production activities, the concept of 'upgrading' explores local development trajectories in a bottom-up fashion. GVC research suggests that the drivers and constraints of local development prospects, as captured by the notion of GVC upgrading, are closely linked to the type of inter-firm linkage that connect local firms with global buyers. The dialectics of supplier upgrading versus downgrading provide important categories for studying the restructuring of global food systems.

Value chain upgrading can be defined as the pursuit of firms "to make better products, make them more efficiently, or move into more skilled activities" (Humphrey and Schmitz 2002:1017). This process may take various forms, including product innovations ("product upgrading"), the reorganisation of production activities ("process upgrading"), the acquisition of new capabilities ("functional upgrading"), or the step into new industries ("inter-sectoral upgrading") to improve their position in global value chains (ibid.).

A central assumption of GVC scholars is that the integration of local firms into global production networks opens opportunities for upgrading. The interaction of local industries with global lead firms can induce organisational learning processes and knowledge spill-overs, rendering GVCs a potential avenue for industrial development. As Swinnen and Vandeplas (2011: 1) point out, "one of the most important mechanisms underlying the globalization process lies in the transfer of advanced production capabilities to low-wage economies". Most of the literature on GVC upgrading assumes that such capabilities are primarily conveyed through the value chain, from lead firms to their suppliers (Humphrey and Schmitz 2002). In this regard, the type of value chain governance is regarded as crucial for suppliers' capabilities to benefit from industrial learning and economic development.

In the GVC literature, the agri-food sector has served as a prominent example to illustrate how global buyers can play a pivotal role in the provision of skills and know-how to their suppliers, allowing them to upgrade into higher value-added segments (Humphrey and Memedovic 2006). Upgrading pathways are often characterised by a shift from exporting primary commodities towards increased value addition in processing. Finally, firms may enter the distribution and marketing of packaged consumer goods (Fernandez-Stark et al. 2011). This linear upgrading process might be triggered by outsourcing of production activities from lead firms to their suppliers or, similarly, by vertical integration between buyers and their suppliers (Dries and Swinnen 2004; Dolan et al. 1999). The transfer of knowledge and technology might also be facilitated through trainings or technical assistance of lead firms in order to improve the quality, consistency or reliability of their supply (Dolan et al. 1999). Such direct assistance may coincide with the provision of inputs or credit (Reardon et al. 2009).

2.4 Global value chains and institutions

By connecting upgrading efforts of suppliers with the governance of lead firms, the GVC framework bridges the analytical divide between local agency and global industry structures. Therefore, it offers a way to provide "valid inferences from micro-level actors (like firms) to macro-sociological, development outcomes" (Dallas 2014: 316). However, with a focus on firm-level actors (at the local and the global level), GVC analysis has tended to marginalise the wider institutional context in which inter-firm relations are embedded (Bair 2005; Peters 2008; Neilson and Pritchard 2009; Raikes et al. 2000; Selwyn 2008; Smith 2015; Thomsen 2007).

While Gereffi (1995) introduced the institutional context as a fourth dimension into the GVC framework (next to its input-output structure, its geographical extension, and its governance structure) he "provided little indication of the exact meaning of this term" (Thomsen 2007:3). As a result, the GVC literature is largely preoccupied with the ways in which power and knowledge flow within value chains. By contrast, local institutions and particularly the state are "rarely placed in the foreground, and, even more rarely, given due theoretical consideration" (Neilson et al. 2014). This was presumably intended, as Gereffi contends that "the competition among firms from different business systems in overseas markets tends to diminish the influence of national origins on firms' behaviour" (Gereffi 2005: 170). Such claims correspond with wider tendencies in global economic analysis to render the capacity of states ineffective and outdated in regulating global markets. In its most extreme form, 'hyper-globalists' have predicted that the declining importance of national regulatory bodies will ultimately lead to a situation in which the 'global' entirely replaces the 'national' as economic unit, highlighting the 'disembedding power' of globalisation which detaches social relations from their localised contexts (Cairncross 1997; Ohmae 1994).

However, the alleged "end of geography" (O'Brian 1992) has been opposed by various scholars, with some arguing that even multinational corporations (MNCs) remain carriers of national institutions and ideological traditions of their home countries which guide their internal processes and external relationships (Pauly and Reich 1997). From this perspective, globalisation is not an anonymous force 'out there' that exerts homogenising pressures on localities and firms (Giddens 1996). Instead, economic actors remain 'grounded' in specific locations, while globalisation has increased the impact of extra local institutions on economic dynamics within a region (Dicken 2007; Sturgeon et al. 2008). Such considerations have important implications for the conceptualisation of GVC governance as well as the ways in which GVC upgrading occurs.

Governance and institutions

As outlined above, the most widely applied concepts of GVC governance draw on the power of lead agents as well as the complexity of inter-firm transactions. While Gereffi et al. (2005) acknowledge that institutions and the social context matter, they state: "We feel confident that the variables internal to our model influence the shape and governance of global value chains in important ways, regardless of the institutional context within which they are situated" (Gereffi et al 2005: 82). However, depicting the institutional environment of economic actors as an "anonymous global space" (Lane 2008: 228) ignores that the ways firms are connected, where they are located and how power is distributed between them, are to a large degree mediated by political-economic institutions. Such institutions may derive from state authorities and public policies, but similarly from business association or civil society, both in upstream and downstream markets.

The importance of the institutional environment in downstream markets has been investigated by Palpacuer et al. (2005), who find that the sourcing practices of global apparel brands are significantly forged by institutions in their home countries. The authors point to varying pressures from financial markets on lead firms, with implications for their choices of suppliers and the distribution of value along the chain. This is consistent with findings by Lane (2008) who shows at the example of the clothing and pharmaceutical industries that the origin of firms in different varieties of capitalism has substantial influence over firm strategies in GVCs. In addition to financial systems, she finds that the state (as policy maker, regulator, and provider of infrastructure), as well as the system of education and training shape the organisation and governance of GVCs. In a similar vein, Gibbon (2008) shows that the governance structures of apparel GVCs in sub-Saharan Africa are significantly shaped by geographically specific conventions and trade regulations in end-market destinations. These include varying duty regulations, rules of origin and quota-systems which lie beyond the control of lead firms. Hence, the author concludes that lead firms "are always 'convention takers' rather than 'makers'. This goes especially for conventions governing corporate strategy. They are almost always trade agreement 'takers' too. [...] Thus chain driving always occurs in the context of strong constraints on how buyers can organize value chains" (Gibbon 2008: 40). These findings have been substantiated by studies in the agro-food sector, where food safety concerns and phytosanitary standards exert pressures on lead firms. For example, Dolan et al. (1999) illustrate how the UK Food Safety Act of 1990 has shaped the sourcing practices of UK supermarkets in Africa, leading to new forms of explicit buyer-supplier coordination which had previously been based on market exchanges.

Beyond state institutions, value chain operators similarly have to conform to private industry standards and certification schemes which have become critical determinants of GVC participation. While value chain actors may be involved in setting standards and monitoring their implementation, 'external' actors that are not directly involved in productive activities, such as NGOs or consumer advocacy groups, often play a similarly important role in shaping formal standards or informal conventions (Jespersen et al. 2014). The same holds true for campaigns launched by activist groups that seek to shift corporate social and environmental practices (Kolk 2005; Van Tulder and Kolk 2001).

Insights about the impact of the institutional environment in lead firms' home countries have been complemented by research on institutional arrangements in upstream markets. Thomson (2007) draws attention to the Vietnamese garment industry, where the ability of local enterprises to integrate into global value chains is largely mediated by business-state relations, that determine firms' access to export quotas, capital or contacts with buyers. Such entanglements of private and public actors may similarly be leveraged to reconfigure power relations along value chains. For example, Quark (2014) highlights the intersection between private sector governance and geopolitics at the example of the cotton value chain where the US state entered into coalition with transnational merchants to gain hegemony over institutions that govern quality along the value chain. Neilson and Pritchard (2009) broaden the analysis of institutional impacts on GVC governance beyond state agencies by pointing to the important role of industry associations, consumer advocacy groups and multi-stakeholder initiatives. At the example of the South Indian coffee and tea industry, they show how these place-specific institutional arrangements allow primary producers to engage with downstream buyers in order to negotiate the governance of the value chain, including labour and environmental issues.

These findings call into question the primary role of global lead firms in the governance of value chains. Instead, they suggest that the 'internal' governance of GVCs is often inseparably connected to the 'external' institutional and regulatory context within which value chains operate. The power to govern globally dispersed economic activities is not simply 'possessed' by firm-level actors but often negotiated through institutionalised arrangements where political and economic power intertwine in 'reiterative processes' (Mayer and Phillips 2017; Neilson 2014). In line with this argument, Bair (2005) calls the 'external' nature of institutional environments into question by pointing out that contextual factors "are not exterior to, but rather constitutive of, these chains in ways that are critical for understanding their social and developmental consequences" (Bair 2005: 168).

However, lead firms tend to remain at the centre of research on GVC governance, which is why Ponte and Sturgeon (2014) recommend future studies to engage in a "more ambitious analysis of how, overall, GVC governance is mutually constituted by broader institutional, regulatory and societal processes" (Ponte and Sturgeon 2014: 197).

Upgrading and institutions

Calls for an enhanced appreciation of the institutional environment have similarly surrounded the concept of GVC upgrading. There is little doubt that the process of firms moving into more sophisticated and higher value-added activities is closely connected to the acquisition of knowledge and technology. While downstream buyers can be important sources of information about end-market requirements, changing consumer preferences and technological advances, there is mixed evidence whether this knowledge is actually passed on to suppliers. In fact, lead firms may similarly impede suppliers in their efforts to move into higher-value activities, particularly if supplier upgrading challenges their own advantaged position in the value chain. Hence, there are considerable doubts whether the constructive role of buyers in supplier upgrading represents a generalisable phenomenon (Giuliani et al. 2005; Minten et al. 2009).

By contrast, many empirical studies have pointed to the central role of the institutional environment in triggering upgrading and innovation of local firms, allowing them to tap into new products and end markets. Selwyn (2008) shows, for example, how the Brazilian state has facilitated grape exports and enabled local producers to overcome marketing and technological gaps. In this case, economic upgrading is primarily derived from the dynamic relationship between producer organisations and state agencies. Business-state relations have similarly allowed Indonesia's timber industry to upgrade from raw material exports to plywood manufacturing. As Gellert (2003) argues, an alliance of timber-producing firms and the state enabled local firms to gain control over domestic raw material and to access international markets. Other studies highlight the critical role of state support for workforce development (Tewari 2006), the participation of local businesses in international trade fairs (Bazan and Navas-Alemán 2003) or to comply with international quality standards (Jespersen et al. 2014). The state may similarly take on crucial tasks in providing input subsidies, promoting access to credits or by incentivising exports through differential export taxes (Fold 2000).

Furthermore, international trade agreements may provide the main impetus for upgrading opportunities in exporting economies. Bair and Gereffi (2002; 2003) illustrate the key role of the North American Free Trade Agreement (NAFTA) for stimulating upgrading processes in the Mexican textile and apparel industry from the low value-added assembly model towards full-package production. This process similarly expanded the responsibilities of Mexican manufacturers towards a range of new tasks (including the procurement of raw material), and thereby enhanced their autonomy vis-à-vis their buyers and opened new learning opportunities. The authors conclude that "upgrading prospects, and developmental outcomes more generally, are determined not just by the organizational dynamics of commodity chains but also by several layers of institutional environments" (Bair and Gereffi 2003:165). While these findings highlight the key role of public institutions in inducing upgrading processes, economic actors may similarly take an active role in creating new institutions or manipulating existing ones in order to capture more profits from value chain participation. This comprises the creation of private codes of conduct to signal enhanced quality (Mohan 2016) or participation in collective industry bodies, such as planters' associations or commodity boards, to counter downward pressures on prices (Neilson and Pritchard 2009).

A review of the upgrading literature by Pipkin and Fuentes (2017) confirms the central role of institutions in enabling or constraining local firms to upgrade. While the authors find a subordinate role of advanced-country buyers in initiating supplier upgrading, they state that "nearly every instance of an industry leaping to the forefront of its Global Value Chain took place in a context with well-established, high-capacity institutions - especially public institutions, but also developmental business associations, universities, and other actors that might support regulation, technical learning and public goods provision" (Pipkin and Fuentes 2017: 550).

In summary, empirical studies point to the crucial role the institutional environment in shaping the organisational structure of GVCs and in determining the development opportunities of regions that integrate into GVCs. Such institutional pressures may derive from state institutions in upstream or downstream markets, or similarly from private sector organisations and civil society. Therefore, any attempt to provide a holistic understanding of the geographical and organisational structure and restructuring of GVCs has to acknowledge that "commodity chains link not only firms in different locations, but also the specific social and institutional contexts at the national (sometimes subnational) level, out of which all firms arise, and in which all [...] remain embedded" (Henderson et al. 2002: 441). These insights call for broadening the conventional analytical focus beyond 'intra-chain' dynamics of particular GVCs by including the interaction of firms with their wider social and political environment. Hence, the remainder of the following chapter will integrate elements from resource dependence theory (RDT) and institutional theory into GVC analysis to arrive at an institutionally enriched GVC approach. The point of departure is a discussion of key assumptions of both literatures which allows for theorising different organisational responses to institutional pressures.

Chapter 3: The embeddedness of global value chains

While the importance of the institutional context has received increasing attention in GVC analysis, it has been weakly theorised and there has been very little engagement with other schools of thought. According to Neilson and Pritchard (2009: 9) "researchers generally recognize that 'institutional contexts' play a vital role in shaping global value chains, [but] what has gone missing in the literature has been a precise articulation of what 'institutions' actually are, and how they relate to GVC governance".

Neilson and Pritchard's approach posits that economic actors are enmeshed in placespecific contexts, comprising political institutions, cultural norms and social structures which determine the spaces of action for economic agents. While such embeddedness arguments have long been prominent to analyse firm-environment relations within a region (Grabher 1993; Morgan 1997), Neilson and Pritchard extend the focus on localised social relationships within regions by larger-scale structural pressures. These different scales of embeddedness, from the local to the global, are interconnected with one another and constitute an arena of struggle in which upstream producers negotiate their relationship with buyers. As the authors argue:

Institutional formations and governance arrangements coexist in an iterative nexus within global value chains. Crucially, this iterative nexus is defined by *struggle*. The interplay of new forms of value chain governance with differentiated institutional environments triggers conflicts and tensions of various kinds. The ways these struggles are played out and resolved configures how producers are inserted within global value chains and, more to the point, the economic returns and level of control producers can exercise within them. The detail of struggle, therefore, becomes a prism through which to observe the broader set of debates about the implications of global value chain restructuring. (Neilson and Pritchard 2009: 9, italics in original)

In this study, I follow Neilson and Pritchard's framework to analyse industrial restructuring processes as an outcome of economic actors' engagement with their institutional environment. Their 'institutionally enriched GVC approach' proves particularly valuable in addressing calls for studying the restructuring of agri-food industries at the intersection of value chain governance and local institutional processes. However, while Neilson and Pritchard's primary concern is "to 'get inside' a value chain in the midst of transformation, and to document the varied struggles which are shaping the politics of engagement between producers and downstream actors" (Neilson and Pritchard 2009: 10), they offer only limited theorisation about

the concrete strategies which economic agents employ to negotiate their position in value chains.

Despite acknowledging that actors' engagement with their institutional environment may take unpredictable and ambiguous forms, this study attempts to refine the notion of 'value chain struggle' by elaborating on different strategies which GVC actors may employ in response to their institutional environment. For this purpose, Christine Oliver's (1991) study of 'strategic responses to institutional pressures' offers a promising perspective. Oliver integrates resource dependence theory (RDT) and insights from institutional theory in order to identify different strategies which economic actors pursue to address institutional pressures, ranging from passive conformity to active resistance. The conceptual framework applied in this study synthesises Neilson and Pritchard's 'institutionally enriched GVC approach' with Oliver's work on 'strategic responses to institutional pressures' to conceptualise global industrial restructuring as an outcome of GVC actors' strategic engagement with their institutional environment.

The remainder of this chapter discusses key insights of institutional and resource dependence theory. The discussion does not attempt to give full treatment to all variants of these two theoretical strands. Instead, it focuses on aspects which help to theorise the interaction of GVCs with their institutional context.

3.1 Institutions and economic performance

Across large parts of the social sciences, there has been increasing attention paid to institutions. This "institutional turn" has included economic geography (Amin 2002), sociology (Meyer and Rowan 1977), political science (March and Olsen 1984) and economics (Williamson 1975) leading to a broad spectrum of institutional approaches, ranging from legal to cultural aspects. The basic similarity between these approaches is the assertion that patterns of social life is not solely an outcome of individual activities but additionally by institutions that shape individual behaviour (Clemens and Cook 1999).

Due to its widespread application in different academic fields, the notion of 'institution' has evoked diverse understandings, most of which have been "notoriously unspecific" (Evans 2006: 2). In the social sciences, studies widely refer to the term as established rules that give structure to human interaction (Hodgson 2006). Owing to his precise articulation of key concepts in institutional analysis, many scholars have seen particular value in the work of Douglass North, who defines institutions as "the rules of the game in a society or, more formally, [...] the humanly devised constraints that shape human interaction" (North 1990:3). Such rules encompass formal laws and informal conventions which may impede certain forms of human behaviour, but they similarly enable actions that would not be possible in their absence.

Institutions have to be distinguished from organisations, which represent groups of individuals, whether they are firms, activist groups, or associations, that are created to pursue some collective purpose (Ingram and Clay 2000). While organisations might themselves comprise a set of rules, these only apply internally. Therefore, North analytically treats organisations as unitary actors, distinct from their 'institutional environment' which comprises the entirety of informal and formal rules to which organisations are subject (Rutherford 2014). North draws the distinction between institutions and organisations in analogy to 'providers of the rules' and 'agents of institutional change' and contends that both are mutually constitutive: "what organizations come into existence and how they evolve are fundamentally influenced by the institutional framework. In turn, they influence how the institutional framework evolves" (North 1990: 5).

The mutual dependence and interaction between economic actors and their institutional environment perpetuates and reinforces institutions once they are in place. This durability of institutions is further strengthened through the formation of individuals' habits, understood as the disposition to adopt a certain behaviour in particular situations (Peirce 1878; see MacKinnon et al. 2009). Habits are created through repetitive actions and thought, which in turn affect individuals' preferences and beliefs. They are distinct from behaviour, however, in the way that they are not necessarily carried out but provide a repertoire of potential behaviours triggered in certain contexts. Hodgson stresses the following:

Institutions are social structures that can involve reconstitutive downward causation, acting to some degree upon individual habits of thought and action. [...] Insofar as institutions lead to regularities of behavior, concordant habits are laid down among the population, leading to congruent purposes and beliefs. In this way the institutional structure is further sustained. (Hodgson 2006: 7)

Institutional theorists utilise this self-perpetuating character of institutions to explain the economic landscape. By providing the structure in which economic activity is carried out and coordinated, institutions preserve existent economic practices and thereby become 'carriers of history' (Martin 2000). In other words, institutions "connect the past with the present and the future, so that history is a largely incremental story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story" (North 1990: 118). Thus, an analysis of economic organisation and restructuring has to consider the path-dependent nature of pre-existing rules and norms through which the behaviour and habits of economic actors becomes socialised.

Literature on the relationship between institutional and economic dynamics has traditionally had a rather narrow focus on the formal, regulative dimensions of institutions (Wood and Valler 2001). However, Bathelt and Glückler (2013) remind us that not all codified rules are institutions, as rules remain meaningless for social life if they are not incorporated into common practice. Hence, for laws and regulations to become institutions, they must be adopted by individuals to the point that compliant behaviour acquires a customary and normative status (Hodgson 2006). Accordingly, more recent contributions have stressed the cognitive and cultural elements of institutions. These comprise ideologies, myths and taken-for-granted beliefs which individuals have learned during their lifetime and which serve as 'templates' (Powell and DiMaggio 1991) or 'archetypes' (Greenwood and Hinings 1993) for organising their perceptions and decision making. As Hodgson (2009: 15) points out, "all processes of rational decision-making depend on acquired cognitive frames for the selection, prioritization, interpretation and understanding of the huge volume of sensory stimuli that reaches the human brain [...] These rules and means of categorization and understanding have to be learned in a social context."

The institutional context of an organisation is comprised of regulative, normative, and cognitive elements which call for different approaches in institutional analysis (Scott 2010). Studies on the regulative dimension of institutions tend to focus on more formalised, explicit rules. Organisational and behavioural changes are primarily based on coercive means such as legal obligations by policies and laws. Scholars investigating normative aspects give priority to informal social obligations which shape economic actors because they are regarded as 'appropriate'. In this regard, organisational changes are brought about by feelings of obligation and a sense of duty. Studies on the *cognitive* elements emphasise the role of conceptual beliefs, culture, mental models and shared interpretations in framing individual perceptions and decisions. Here, the rationales for actors' behaviour and organisational change are internalised and valued by individuals who believe in the goals and objectives of their actions (Palthe 2014).

In summary, an institutional approach to economic behaviour asserts that "actors pursue their interests by making choices within constraints" (Ingram and Clay 2000: 527). These constraints are the rules within a society that define legitimate action, including state laws and regulations as well as norms and shared interpretations within society. While these considerations help to understand the role of institutions in shaping the path-dependent trajectories of particular industries, they provide limited insight into the spatial distribution of particular institutional arrangements and related economic performance. As Neilson and Pritchard (2009: 51) observe, "[North] contends that 'institutions matter', but does not specifically come to terms with the more detailed geographical questions of their existence; how and why particular institutional arrangements coalesce in individual places". Granovetter's notion of embeddedness offers important insights to address these shortcomings.

3.2 The embeddedness of economic actors

The embeddedness approach depicts economic action as contingent upon and inseparable from ongoing social relationships, which provide the basis for decision-making and expectations. Therefore, the rationality of economic actors remains context-specific and place-dependent.

Scholars associated with the new institutional economics (NIE), including Douglass North, conceptualise economic organisations as atomised, rent-seeking actors (MacKinnon et al. 2009). This atomisation of economic action might take an undersocialised or an oversocialised form. While the former depicts human actions as being carried out in anonymous markets, regardless of the social structure or power relations, the latter regards human action as determined by external social influences that condition individual behaviour. Granovetter (1985: 485) points out:

Despite the apparent contrast between under- and oversocialized views, [...] both have in common a conception of action and decision carried out by atomized actors. In the undersocialized account, atomization results from narrow utilitarian pursuit of self-interest; in the oversocialized one, from the fact that behavioural patterns have been internalized and ongoing social relations thus have only peripheral effects on behaviour.

The 'embeddedness' approach overcomes this atomised conceptualisation of economic actors by highlighting the role of ongoing social relations which link actors within larger social networks (Grabher 1993). Polanyi (1944) is typically presented as the founder of the embeddedness concept, which he introduced in his seminal book *The Great Transformation*. Granovetter (1985) revived the original notion and popularised among scholars from various disciplines. The embeddedness approach contends that economic activities are carried out within a variety of networks of relations, and hence, they can never be regarded as independent but always rely on interpersonal or interorganisational connections with varying degrees of trust or confidence.

As the rules which guide social relations within networks are actively produced and reproduced during ongoing interactions, rationality becomes a context-specific notion which may change over time and between localities. Hence, Granovetter (1985: 506) points out, "what looks to the analyst like non-rational behavior may be quite sensible when situational constraints, especially those of embeddedness, are fully appreciated." Such constraints include bounded rationality of economic actors, shared collective understandings, as well as structural patterns and power struggles of interpersonal relations (Zukin and DiMaggio 1990). Therefore, economic rationality is often contingent on highly normative assumptions (Fuchs and Schalljo 2017).

Economic geographers have investigated the embeddedness of individuals and organisations as an inherently spatial process. As Dicken and Thrift (1992: 287) argue, the embeddedness of economic actors "involves an interaction between the specific cognitive, cultural, social, political and economic characteristics of a firm's 'home territory'". Research on regional innovation systems (Grabher 1993), learning regions (Morgan 1997), clusters (Porter 2000), industrial districts (Asheim 1996), or innovative milieus (Ratti et al. 1997) haveexplicitly or implicitly-incorporated this perspective. While these notions have emerged from distinct schools of thought, they share a focus on the intangible assets fostered by localised social relationships, including access to tacit knowledge and collective learning (Fromhold-Eisebith 2010).

These insights have triggered discussions about the role of embeddedness in economic development. The notion of 'institutional thickness' has become a key reference to highlight the importance of mutually connected organisations as a prerequisite for successful regional development (Amin and Thrift 1994, 1995). Institutional thickness is associated with four principles. First, it is characterised by a dense presence of local institutions. These comprise economic organisations-such as business associations, financial bodies and business services providers—as well as non-market actors including chambers of commerce, governance agencies and marketing boards. Second, these organisations must show a high level of interaction in the form of contacts and information exchange. Third, this interaction follows place-specific rules and norms, putting constraints on potential infringements. Finally, actors share awareness and commitment to a common enterprise. Amin and Thrift (1994) argue that institutional thickness increases local legitimacy, enhances relations of trust and facilitates collaborations and collective actions. Thus, institutional thickness is "a simultaneous collectivization and corporatization of economic life, fostered and facilitated by particular institutional and cultural traditions which appear to have been central to the generation of success within neo-Marshallian nodes in global networks" (Amin and Thrift 1994: 15). This suggests that places characterised by a greater number of interacting institutions are more likely to prosper as compared to places with a 'thin' institutional structure (Beer and Lester 2015).

In a similar vein, Storper (1997) identifies the important role of intangible, regionally specific collective assets which he labels 'untraded interdependencies'. These include conventions, informal rules and common languages, which allow to manage economic uncertainties, communicate information and interpret and develop knowledge. In this way, untraded interdependencies facilitate collective action and mutual learning processes that stimulate innovation. In line with the concept of 'institutional thickness', territorial proximity of economic activities is crucial in these regional assets.

However, the territorial embeddedness of economic actors, which are 'anchored' in particular places, represents only one among various forms of embeddedness. Revisiting Polanyi and Granovetter's original work, Hess (2004) adds two further types: societal and network embeddedness. The former refers to the cultural and political heritage of actors that influence their perception, strategies and economic behaviour. Network embeddedness describes the structure of relationships (characterised by varying degrees of stability and durability) that actors are involved in. While a number of different typologies of embeddedness have been developed (e.g. Zukin and DiMaggio 1990), at the core of any taxonomy is the contention that economic activity is socially constructed and maintained through various interorganisational and institutional settings. Economic actors strategize within this plurality of networks, where constraints and pressures on their behaviour stem from a variety of sources (such as culture, politics, network structures) that may be competing and conflicting.

3.3 Organisational responses to institutional pressures

Whereas institutional theory provides important insights into the role of social, political and cultural environments in shaping economic activities, it has been criticised for simplifying the behaviours that economic actors employ in response to institutional pressures that are exerted on them. Most institutional theorists contend that the adaptation of organisational strategies to institutional pressures can be explained by a number of benefits that organisations gain if they conform to their environment—for example, increased prestige, social support or access to resources (DiMaggio and Powell 1983; Scott 2008). Organisations that conform to the rules that identify appropriate activities are expected to enhance their own survival prospects by gaining stability and legitimacy (Meyer and Rowan 1977). In this regard, "the general theme of the institutional perspective is that an organization's survival requires it to conform to social norms of acceptable behavior" (Covaleski and Dirsmith 1988: 563). From this perspective, institutions provide templates or "interpretive schemes" that guide the formal structure of organisations as well as inter-organisational exchanges (Scott 2008). As a result, organisations are predicted to resemble each other over time, a process referred to as institutional isomorphism (DiMaggio and Powell 1983). The sources of isomorphic organisational change have been attributed to coercive authority, normative pressures, as well as mimetic behaviour encouraged by uncertainties.

However, by focusing on isomorphic organisational change, institutional theorists have largely ruled out alternative responses to institutional pressures other than passive conformity. As Oliver (1990: 149) points out, institutional theorists "have tended to limit their attention to the effects of the institutional environment on structural conformity and isomorphism and have tended to overlook the role of active agency and resistance in organization-environment relations." In order to extend this limited range of organisational strategies, Oliver proposes to apply insights from RDT, which complements institutional theory in a number of ways.

Resource dependence theory and organisational strategies

RDT was introduced by Jeffrey Pfeffer and Gerald Salancik in their seminal book The External Control of Organizations (1978). In line with institutional theory, RDT acknowledges that organisations are subject to external constraints and, hence, Pfeffer and Salancik argue that "to understand the behavior of an organization you must understand the context of that behaviour" (Pfeffer and Salancik 1978: 1). However, in contrast to the primacy of institutions, RDT assumes that constraints on organisational actions derive primarily from external dependencies related to critical resources, comprising raw materials, capital, workers, facilities, or technology as well as intangible resources related to trust, reputation and legitimacy (Biermann and Harsch 2017). These resources become 'critical' if their absence endangers an organisation's operations. The flow of resources may be controlled or affected by other public and private organisations - including governmental organisations, federations, associations and customers. Organisations in charge of vital resources gain power over other actors and, hence, may pose demands to those seeking access to these resources. Thus, power and dependence are counterparts of each other (Davis and Cobb 2010)⁴.

RDT scholars assume that organisations seek to reduce or avoid dependence and related uncertainties, referring to the inability to accurately predict and anticipate future availability and access to needed resources. For this purpose, they seek control over vital resources, whereby new patterns of dependence and power asymmetries are produced that affect organisational behaviour (Pfeffer 1987). Pfeffer and Salancik (1978: 92 ff.) identify a variety of actions that organisations can exercise to manage external constraints or to gain control over the allocation of critical resources. One option is to avoid constraints posed by concealing

⁴ In this regard, Levy (2008: 15-16) observes some similarities between the sources of power in resource dependence theory and the one in Gereffi's conceptualisation of power in multinational corporations.

certain information (Nienhüser 2008). Actors may also attempt to alter patterns of interdependence by negotiating external relations. This may help to control the source of dependence (for example through mergers or acquisitions of competitors) or to stabilise resource flows by entering into collective structures of inter-organisational coordination (such as joint ventures). Another strategy offers the co-optation of members of constraining organisations, for example by inviting them to participate in internal decision-making processes (board interlocks). These strategies may compromise an organisation's autonomy for the benefits of improving the predictability of resource flows and thereby reducing uncertainty (Biermann and Harsch 2017). In addition to direct engagement with the source of constraint, organisations may similarly undertake activities to alter the environment and reduce environmental dependency. This can be done by influencing norms or regulations that bear on organisations' access to vital resources. Examples include lobbying political authorities or developing public relations to create favourable conditions. Thus, Pfeffer and Salancik (1978: 190) argue that organisations are not only constrained by their environment, but that "law, social norms, values, and political outcomes reflect, in part, actions taken by organizations in their interest of survival, growth, and enhancement."

A typology of strategic responses to institutional pressures

Insights of RDT into the strategic actions of organisations can be complementary to institutional theory (Scott and Davis 2015; Hessels and Terjesen 2010). As Oliver (1991) argues, both theories converge in the assumption that organisations must respond to external constraints and expectations in order to ensure their survival. These constraints may derive from a wide range of constituents, including the state, interest groups or informal norms. Furthermore, both approaches suggest that organisations seek stability and legitimacy to ensure their survival.

Differences exist, however, regarding the question of how stability and legitimacy is achieved. Institutional theorists emphasise the survival value of accepting and incorporating institutionalised norms, values and expectations (DiMaggio and Powell 1983), thereby explaining how organisations may adapt to institutional pressures without necessarily exercising strategic choice. By contrast, RDT stresses the necessity for organisations to determine their own fate more actively by managing or controlling resource flows and by negotiating interdependencies (Scott and Davis 2015). Drawing on this variation in the proactiveness and awareness of organisations, Oliver (1991:151 ff.) identifies five types of organisational strategies in response to institutional pressures: acquiescence, compromise, avoidance, defiance, and manipulation (Table 2).

Acquiescence refers to organisational behaviours that align with values, norms, and expectations in their environment. This may take the form of unconscious adherence to rules and values that have become taken-for-granted and conventional through historically repeated action. Under these conditions, organisations incorporate their institutional environment through habit rather than by strategic intention. Another form of acquiescence represents the (conscience or unconscious) imitation of other actors, for example to reduce uncertainties or to gain trust. The most conscious way to align organisational structures and behaviours with institutionalised rules is compliance, which requires both awareness and acceptance of external constraints. Hence, compliance implies strategic intent to conform and is thereby more active than habit or imitation.

Table 2: Strategic Responses to Institutional Processes

Strategies	Tactics	Examples
Acquiesce	Habit Imitate Comply	Following invisible, taken-for-granted norms Mimicking institutional models Obeying rules and accepting norms
Compromise	Balance Pacify Bargain	Balancing the expectations of multiple constituents Placating and accommodating institutional elements Negotiating with institutional stakeholders
Avoid	Conceal Buffer Escape	Disguising nonconformity Loosening institutional attachments Changing goals, activities, or domains
Defy	Dismiss Challenge Attack	Ignoring explicit norms and values Contesting rules and requirements Assaulting the sources of institutional pressure
Manipulate	Co-opt Influence Control	Importing influential constituents Shaping values and criteria Dominating institutional constituents and processes

Source: Oliver (1991)

If institutional demands conflict with the internal structure or objectives of organisations, or if various institutional pressures contradict each other, organisations may seek a compromise. Such tactics encompass balancing between multiple institutional constituents to accommodate competing pressures and expectations. Organisations may also choose to pacify institutional pressures by conforming only to minimum standards while resisting more far-reaching demands. The most active form of compromise represents bargaining, whereby organisations seek concessions from external constituents in order to reduce necessities to comply with conflicting institutions. Overall, all forms of compromise tactics allow for partial compliance with institutional constraints while organisations actively pursue their own interests.

At the same time, organisations have various options to avoid the necessity to conform to institutional demands. This may be achieved by concealing nonconformity, for example by pretending compliance ("window-dressing"). Furthermore, organisations can try to buffer themselves from external scrutiny by hiding certain activities from inspections. Another option is to escape from the domain in which certain institutional pressures are exerted. To reach this, organisations can alter their own goals and activities or physically relocate to locations where certain rules do not apply.

Defiance refers to more active resistance to external pressures, characterised by unequivocal rejection of institutionalised rules. For example, if enforcement mechanisms are flawed, organisations are likely to dismiss compliance by ignoring institutional rules. Such activities may also be carried out openly to challenge collective rules or shared beliefs. The most proactive defiance tactic is realised by attacking institutionalised values and authorities that represent them.

Manipulation of institutional pressures requires some power over institutional constituents or rule-making procedures. Organisations that attempt to achieve this may try to co-opt institutional constituents—for example, by persuading public officials to join the organisation or to support the organisation's targets. Other manipulation tactics may attempt to influence institutionalised practices and values more generally through lobby and advocacy work.

Owing to its complementary focus on RDT and institutional theory (active interest seeking versus passive compliance), Oliver's typology provides a comprehensive overview about the relationships between organisations and their environment. The following section brings these insights together with Neilson and Pritchard's 'institutionally-enriched GVC framework' to theorise how value chains restructure in response to their institutional context.

3.4 An institutionally enriched GVC framework

The preceding chapter has introduced the GVC framework as an analytical tool for explaining global industry restructuring and demonstrated a need for closer attention to the institutional environment in which value chains are embedded. In order to do so, insights from institutional theory and RDT were proposed to theorise the strategic engagement of economic agents with their institutional context. Figure three integrates these different elements in order to conceptualise the intersection of value chain actors and their institutional environment, leading to various forms of strategic institutional engagements that underlie the restructuring of global industries.

The proposed 'institutionally enriched GVC framework', adapted from Neilson and Pritchard (2009), recognises that the construction and restructuring of global industries remains largely shaped by geographically specific institutional arrangements. While value chain actors must take into account the universalising logics of private governance by global lead firms, their strategies are to a great extent shaped by the formal and informal rules which persist in individual places. The strategic responses of economic actors to these global and local constraints are the nexus through which GVCs are constructed and maintained.

Whereas this study is particularly concerned with the interaction of the institutional environment and GVCs, the proposed framework remains 'actor-centred' by acknowledging the constitutive role of different strategic responses to institutional pressures. It thereby addresses calls for enhanced appreciation of strategic agency in institutional approaches to prevent deterministic deductions of organisational behaviour. As Gertler (2010: 5) claims, "institutional analysis within economic geography needs to provide more room for agency, as asserted by both individual economic agents (managers, workers, entrepreneurs, and venture capitalists) and organizations such as firms, producer associations, unions, regional governance groups, and universities." Therefore, this study conceptualises industrial restructuring primarily as an outcome of individual and collective actors which pursue their interests by making choices within institutional constraints (Ingram and Clay 2000).

Organisations inserted Institutional Forms of institutional engagement in global value chains environment Acquiescence - Subject to GVC - Embedding of Compromise production within governance shaped Avoidance larger-scale by lead firms, NGOs, Defiance consumers, private Manipulation structural processes; collective standards regional/ national politics, and socio-**Universalizing logic of** Reconstitution of global value chains: cultural life-ways global private - Implications for supplier upgrading regulation **Territorial** and downgrading differentiation - Changes to the politics of inclusion and exclusion within chains - Changes to forms and scales of chain governance Feedback Loop Feedback Loop **Industrial restructuring** Institutional realignments in production regions Reproduction of territorial differentiation Mediation of lead actor governance along value chains

Figure 1: An institutionally enriched GVC framework

Source: Adapted from Neilson and Pritchard (2009: 10)

The appreciation of individual and collective agency also allows for explaining institutional change—a major shortcoming of many institutional approaches, which often evoke institutions as a given independent variable to explain economic phenomena (Jessop 2001; Thelen 2009). An integration of RDT into institutional theory helps to understand the role of economic actors in actively negotiating their institutional environment in order to gain stability and legitimacy. In this regard, the distinction between 'internal' economic agency and 'external' political processes becomes blurred and appears to be artificial (Levy 2008).

During fieldwork in India and Ivory Coast, the 'institutionally enriched GVC approach' (Figure 1) has served as an analytical framework to identify various forms of institutional engagement along the cashew value chain. The collected data provides rich insights into the role of local institutions in maintaining and restructuring global industries. The following chapter summarizes the empirical findings.

Chapter 4: Governance and upgrading in South-South value chains: evidence from the cashew industries in India and Ivory Coast

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4.1 Introduction

The rapid growth of trade between countries of the Global South has stimulated a recent debate about the implications and outcomes of geographical patterns shifting away from the dominance of North-South relations. Particular attention has been paid to the question of whether South-South links differ from North-South relations in providing better pathways to economic development (Horner 2016; Kaplinsky et al. 2011). Chain concepts such as global value chains (GVCs) and global production networks (GPNs) provide heuristic models for addressing such concerns. By highlighting the coordinating power of lead firms and their role in shaping the development of supplier capabilities, value chain research has helped us to understand the territorial differentiation of global industries. However, studies investigating the impact of different forms of value chain 'governance' on 'upgrading' prospects along the chain have predominantly had a North-South focus. Research on agri-food chains has concentrated mostly on the role of Northern supermarkets and retailers in controlling the terms under which their Southern suppliers operate (Dolan et al. 1999; Ponte and Gibbon 2005). Furthermore, this literature has focused predominantly on downstream tiers of value chains and has paid less attention to the inter-firm linkages closer to the agricultural producers, which is where South-South trade often emerges. Existing studies on South-South relations have revealed much ambiguity in developmental outcomes and have emphasized the need for further research (Bernhardt 2014; Cattaneo et al. 2010; Kaplinsky and Farooki 2010). Horner (2016) points out that such an agenda should encompass paying renewed attention to the governance of GVCs, as well as to the 'circumstances under which upgrading and associated territorial development can occur in South-South GVCs and GPNs' (Horner 2016: 412).

In this study, I attempt to address such issues by analysing the value chain of raw cashew nuts (RCNs) between Ivory Coast and India. As the world's largest processor of cashew kernels, India depends on RCN imports, which are primarily sourced from Ivory Coast. While the Ivorian processing industry is still in its infancy, the last decade has seen a rapid increase in the capacity of domestic cashew factories and there are plans afoot to transform the entire domestic raw nut crop into edible kernels by 2020. Against this background, before going on to analyse the opportunities available to upgrade the Ivorian cashew sector by improving both the quality of the raw nuts and their actual processing, I first explore the governance structure of the RCN channel by identifying the chain actors, their business strategies and resultant forms of interfirm relations. After a theoretical framework and summary of recent research on agri-food value chains, a brief sectoral overview and outline of my methodological approach, I present my empirical findings followed by some concluding remarks.

4.2 Governance and upgrading in agri-food chains

There has been a rapid expansion of research on global commodity chains (GCCs), global value chains (GVCs) and global production networks (GPNs) in the last two decades, which has produced numerous studies that advance theoretical foundations and apply them empirically. Much of this literature focuses on the role of lead actors in governing firm performances along the chain and the implications of that for chain participation and the distribution of revenues. The discussion on different governance types dates to Gereffi's notion of value chain 'driving', which lead firms carry out in a strategic attempt to gain organizational flexibility while remaining in control of their suppliers' product and process parameters (Gereffi 1994). Initially, two forms of value chain governance have been distinguished. *Buyer-driven* chains characterize industries where coordination is exercised through powerful supermarkets, retailers or branded manufacturers setting up decentralized production networks in exporting countries. *Producer-driven* chains feature the large, often transnational manufacturers that carry out a critical part of production themselves while exercising control over their suppliers' product and process specifications.

The global agri-food sector is a prominent example of 'buyer-driven' chains in which supermarkets and retailers dictate the terms under which goods are produced, processed and transported (for example, Dolan et al. 1999; Ponte and Gibbon 2005). However, this classification has been challenged in several respects.

First, the notion of 'buyer' requires further clarification because the degree of power that lead actors exert varies significantly between types of buyers (Ponte 2002). For example, commodity traders tend to exercise a much lower level of chain-driving compared with supermarkets or retailers. As traders focus on volumes rather than on quality-related margins, they are less likely to take a proactive role in setting and controlling rigid product and process specifications (Gibbon 2001).

Second, studies have highlighted that the power to exert control over upstream suppliers may be shared between different lead firms. For example, Fold (2002) draws attention to the 'bipolar' governance structure in the chocolate industry, where coordinating power is fragmented between cocoa grinders and brand-name chocolate manufacturers. Similar observations have been made in the banana sector where the increasing concentration and consolidation of retailers challenges the dominance of vertically integrated multinational corporations (MNCs) (Riisgaard and Hammer 2011). Likewise, several technology intensive sectors have been characterized by the rise of turn-key suppliers with considerable profitability and power vis-à-vis brand-carrying buyers (Sturgeon 2002). Particularly in the PC industry, powerful component suppliers became de facto standard setters controlling the terms of competition among brand companies (Kawakami 2011). Such findings emphasize the dynamic nature of governance structures, resulting from companies' strategic attempts to increase benefits from value chain participation. Functional specialization of firms, accompanied by outsourcing or vertical integration, as well as the creation of competition among suppliers may over time change power relations along the chain. Furthermore, the power of lead firms in value chains might also be altered by extra-chain actors such as governments, standard developers or civil society organizations (Ponte 2014). Conceptualizing such external actors as active drivers of value chains, Ponte and Sturgeon (2014) suggest a distinction between unipolar, bipolar and multipolar forms of governance.

Beyond highlighting the critical role of key actors in coordinating value chain activities, GVC research has helped to explain how economic integration has opened development opportunities for firms and regions, particularly in the Global South. The concept of GVC upgrading was introduced to explore the processes by which value chain actors move into higher value-added activities (Gereffi 2005). Many studies distinguish between four categories of economic upgrading (Humphrey and Schmitz 2002). Process upgrading describes a move into more efficiently organized production processes. Product upgrading refers to a shift towards the production of higher value commodities. Functional upgrading describes the realization of new functions in the value chain. Inter-sectoral upgrading takes place when firms apply competences obtained in one function of the chain in another industry.

The type of chain governance is what mainly shapes upgrading prospects (Schmitz 2004b). Today, agri-food chains are increasingly organized around long-term relationships in 'strategic collaborations' (Gereffi 2014), which give producers opportunities to benefit from the technical assistance and access to knowledge or technology provided by buyers. However, economic upgrading is not an inevitable outcome of GVC participation, for lead firms may prevent their suppliers functionally upgrading (Giuliani et al. 2005), or suppliers themselves may choose to downgrade to lower quality markets (Ponte and Ewert 2009). Furthermore, the type of buyer has direct implications for the upgrading of suppliers. The sourcing strategies of commodity traders, as opposed to supermarkets and retailers, may favour larger suppliers with a view to lowering coordination costs, 'but this does not bear directly on nonvolume-related dimensions of upgrading' (Gibbon 2001: 352). Economic upgrading may also coexist with the downgrading of certain groups in the same chain (Barrientos et al. 2015) or be accompanied by downward pressures on working conditions leading to social downgrading (Bernhardt and Milberg 2011).

Studies have shown that in the last two decades there have been shifts in governance patterns in the agri-food sector, which point to major changes in upgrading opportunities in upstream markets. First, concentration tendencies in the Northern retail sector have strengthened the bargaining position of buyers (Humphrey and Memedovic 2006) and, second, quality-based competition has fostered tighter control mechanisms along agri-food chains and has given rise to the proliferation of (particularly private) food safety and quality standards (Mayer and Gereffi 2010). Lee et al. (2012) point out that the nature of food standards is closely related to the type of lead firm and the degree of lead firm consolidation. Buyer-driven agrifood chains with consolidated retail power are likely to feature food safety standards designed to control risks in line with public regulations and thereby ensure consumer confidence. By contrast, value chains characterized by high fragmentation and the lack of a powerful lead firm typically show weakly developed standards.

While much literature has pointed to the possible detrimental effects of food standards on market access and on the cost advantages of suppliers (Humphrey 2006), standards can induce a 'drive to capability building' (Kaplinsky and Farooki 2010) by demanding advanced managerial competencies. Producers feeding into high-quality markets are particularly likely to benefit from formal contracting accompanied by technical assistance from buyers (Swinnen and Vandeplas 2011). Unlike value chains for undifferentiated commodities, quality-based competition requires tighter chain coordination to safeguard compliance with quality requirements, which often coincide with the provision of inputs, credit, technology or knowledge by buyers (Minten et al. 2009).

Overall, there is mixed evidence about the impact of recent transformations in the agrifood sector. The proliferation of standards and tighter chain governance have favoured some forms of product and process upgrading, but these are often accompanied by the exclusion of marginalized groups. Furthermore, loose forms of chain governance in fragmented upstream markets continue to coexist alongside closer buyer—supplier interaction in quality-conscious markets, giving rise to multiple forms of governance along agricultural chains. However, such

evidence is predominantly based on studies that focus on Southern suppliers catering to Northern end markets and much uncertainty exists about governance in value chains between Southern economies and related upgrading opportunities.

4.3 Changing patterns of global trade: implications for governance and upgrading

Trade between countries of the Global South grew by 320 per cent between 2000 and 2010 compared with a 132 per cent increase of North–South trade over the same period (UNIDO 2015). GVC scholars are paying much more attention to South–South value chains and this has led to a growing body of literature on the role of emerging economies in externalizing their operations to other low income countries (Henderson and Nadvi 2011; Morris et al. 2011), as well as in redirecting their chains towards Southern end markets (Horner 2014). Some studies suggest that South–South chains differ from North–South ones in that they are less tightly controlled, so provide better opportunities to upgrade into higher-value functions facilitated by more equal relationships (Navas-Alemán 2011; UNCTAD 2011).

This initial optimism has recently given way to a more uncertain view, which recognizes a possible trade-off between lower entry barriers and higher competition (Horner 2016). Lower entry barriers may derive from similarities in the regulatory systems of developing countries (UNIDO 2015), a decreased significance of standard specifications and a less sophisticated demand pattern in Southern end markets (Cattaneo et al. 2010; Evers et al. 2014). However, a more competitive division of labour between countries of the Global South, compared with a rather complementary division in North–South chains, might result in 'win–lose' situations related to fiercer price competition (Staritz et al. 2011).

Furthermore, Morrissey (2012) points out that since most foreign direct investment in sub-Saharan Africa is for the purposes of extracting resources, it might create employment for unskilled workers but rarely contributes towards improving technology or knowledge. Hence, the emerging economies' preference to import unprocessed commodities might restrict the suppliers' upgrading prospects to low-technology and low-skill niches of the chain (Cattaneo et al. 2010; Gereffi and Lee 2012). These concerns are reinforced by a fear that the ineffectiveness of industry standards in the Global South could reduce upgrading opportunities (Kaplinsky et al. 2011) and bring about a 'race to the bottom' on working and environmental conditions (Nadvi 2014). This holds especially true for the processing of primary commodities in Southern economies, which often relies on a cheap workforce that tends to be weakly protected by health and safety legislation.

The following case exemplifies the importance of a developing country supplying unprocessed raw materials to an emerging economy. In line with the above considerations, I shall explore how the Indo-Ivorian RCN supply channel is governed and whether this South-South link facilitates upgrading opportunities for RCN suppliers.

4.4 The Indo-Ivorian trade in raw cashew nuts

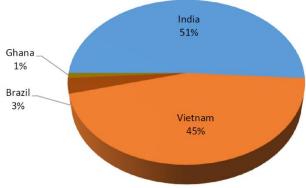
Cashew cultivation in Ivory Coast only started in 1959 (ACi 2010). During the 1990s, production volumes grew significantly from 6300 tonnes in 1990 to 335,000 tonnes in 2008 (ACi 2010) and peaked in 2015 with an estimated volume of 700,000 tonnes (Rabany et al. 2015). In 2011, Ivory Coast became the second largest cashew producer worldwide (Red River 2011) (Figure 2). However, over 90 per cent of Ivorian RCN is exported unprocessed, primarily to factories in India and Vietnam (Figure 3), making Ivory Coast the world's largest RCN exporter.

Indonesia Others 2% India Burkina Faso 21% 2% Vietnam Ghana 18% 3% Cambodia 3% Ivory Coast Brazil 21% Guinea 4% Bissau 7% Tanzania 4% Benin Nigeria 4% 5%

Figure 2: Share of largest RCN producers (2015)

Source: own illustration based on data of Rabany et al. (2015).





Source: own illustration based on data of Rabany et al. (2015).

Cashew processing in India emerged on a commercial scale in the 1920s and within about ten years the first processors had started to import RCNs, mainly from Portuguese Africa (Kannan 2002). Today, India is the world's largest processor and, after Vietnam, its second largest exporter of cashew kernels; the greatest share of its processing capacity is situated in the Southern states of Kerala and Tamil Nadu. India is also the world's largest consumer of cashew kernels with a particular demand for broken grades, which account for up to 10 per cent of the nuts processed with manual cutting machines. To protect its domestic market, the Cashew Export Promotion Council of India (CEPCI) urged the union government to raise the import duty on processed cashew kernels to 46.5 per cent, which effectively put a stop to kernel imports

The rapid growth in demand for cashews on the world market, along with stagnating RCN cultivation in India since the 1990s, has increased the dependence of Indian processors on RCN imports. Between 1996 and 2014, RCN imports to India increased by a factor of 47, with 38 per cent of RCN imports currently originating from Ivory Coast (Foretell 2014) (see Figure 4). In the same period, cashew kernel exports from India almost doubled,⁵ with around 52 per cent of the exported volume feeding into Northern end markets in Europe and North America.⁶

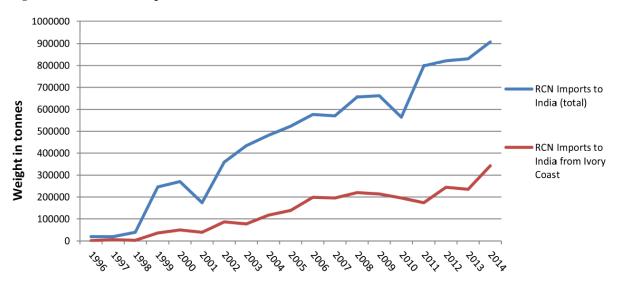


Figure 4: India's RCN imports

to India.

Source: own illustration based on data of UN Comtrade.

The Indo-Ivorian cashew value chain consists of several tiers of traders who link Ivorian cashew farms to Indian processors. During the harvesting season, local village traders (so-called

⁵ Based on UN Comtrade data.

⁶ Estimated from the data of the Cashew Export Promotion Council of India (CEPCI).

'pisteurs') collect RCNs from farm gates. They are often pre-financed by wholesale traders who – either individually or under contract – collect the nuts on behalf of an exporter. Cashew processing has traditionally been a low investment activity with high labour intensity and minimal use of technology (Fitzpatrick 2011). The processing steps consist of drying the raw nuts, pre-treating them through roasting or steam-boiling, deshelling, preparing to remove the inner skin (testa), peeling, grading and packing. To crack the outer shell of the nut, Indian factories mostly rely on semi-mechanized machinery, or manual labourers using sticks or stones. Before the testa can be separated, the kernels are again heated and cooled down to make the skin looser and more brittle. Figure 5 gives a stylized overview of the actors and activities in the cashew value chain.

Ivory Coast India EU / US Domestic Retailer Packers & Roasters Retailers & ocal RCN RCN RČN Kernel Kernel Farmer superexporter trader importer exporter Importer markets Food Wholesale Submanufaccontractor trader turer RCN import Planting RCN collection Storing Kernel import Drying Domestic Roasting Retail retail or Growing Storing Quality Storing Cracking Storing Flavouring Marketing Harvesting Drying control Quality Peeling export Distribution Food Post-harvest Transport RCN Grading manufacturing handling export Packaging Packaging Kernel export Branding

Figure 5: Overview of the Indo-Ivorian cashew value chain

Source: own illustration.

4.5 Research methods

I adopt an exploratory qualitative approach based on empirical research conducted between April and August 2014 in India and between May and June 2015 in Ivory Coast. The primary data came from 102 semi-structured interviews with stakeholders, policy makers and support agencies along the Indo–Ivorian cashew value chain. In India, these comprised 45 face-to-face meetings with personnel in cashew processing factories, including executive staff and factory managers. The sample of interviewed cashew processors included registered companies and the unlicensed cottage units (kudivarappu) commonly found in Kanyakumari in the state of Tamil Nadu. While the statistical data on the cashew industry in South India vary, there are at least

1200 factories in the states of Kerala and Tamil Nadu. Further primary data were collected from two trading companies and three cashew brokers. However, because processors often also trade in RCNs (see below), the distinction between different value chain actors is not always clear. During my fieldwork in Ivory Coast, I interviewed 9 farmers, 16 traders and 19 processors, who together represented 76 per cent of the country's cashew factories. Following an open guideline, the interviews were designed to elicit information on the evolution and prospects of business operations, the types of forward and backward linkages in the value chain, and the importance of standards and external institutions to value chain activities. The collected data were complemented and verified during two meetings with the Cashew Export Promotion Council of India (CEPCI) and three with the Ivorian Cotton and Cashew Council (CCA), each of which also provided me with additional bibliographical information, secondary sources and internal documents. Two NGOs (one in each country) and one Indian labour union offered further information. The meetings lasted between 20 and 150 minutes.

4.6 Governance in the cashew value chain

We now look at how inter-firm relations are organized in the Indo-Ivorian cashew value chain. We see how both the strategies of lead actors and external factors control product and process parameters along the chain, putting pressures on its integration and disintegration at different nodes along the way. For clarity, this part consists of three sections – (1) processing activities in India and their linkages to Northern buyers; (2) the organization of the RCN trade between Indian processors and Ivory Coast exporters, and (3) how the RCN trade operates within Ivory Coast from the farms to the port.

Cashew processing in India

From the start, the availability of cheap labour played a large part in determining the geography and organization of the Indian cashew sector. The relative lack of labour regulations in the Kingdom of Travancore (which covered most of Kerala's territory until 1945) compared with British India was a major reason to locate the industry in Kerala in the 1920s (Harilal et al. 2006). In the early 1950s, Kerala's favourable business environment began to change when the state government introduced various labour laws, including a legal minimum wage for factory workers and several social welfare schemes such as a retirement pension and public health

⁷ According to a V. V. Giri National Labour Institute study, there are 800 cashew factories in the state of Kerala (NLI 2014). In Tamil Nadu, the number of cashew factories in the district of Kanyakumari alone is estimated to be more than 400 (Sivasankaran and Sivanesan 2013).

insurance (Eapen et al. 2004). When this legislation started to threaten Kerala's cheap labour base, the processors began to subcontract the more labour-intensive activities, such as cracking and peeling, to factories in neighbouring Tamil Nadu where labour regulations were less stringent, and the minimum wage was lower. Consequently, the share of Indian cashew factories located in Kerala declined from 92 per cent in 1961 to 42 per cent in 1985 (Srinivasan et al. 1999). At the same time, the number of factories in the border district of Kanyakumari, Tamil Nadu, increased from one registered factory in 1961 to 107 in 1972 (Srinivasan et al. 1999).

The South Indian cashew sector is still characterized by what started as a temporary arrangement to evade labour regulations in Kerala in the 1960s (Eapen et al. 2004). Many Keralan exporters continue to rely on commission agents in Tamil Nadu to process nuts on their behalf (the commission agent employs the labour, bears all expenses and charges on a 'per bag' basis), which is also referred to as 'toll processing'. One of India's biggest cashew exporters has no factory in Kanyakumari, only a warehouse for storing imported raw nuts and a packing centre for the processed kernels (interview, Kanyakumari, 19 July 2014). Commission-based processing has seen the rise of an informal labour force working from home, particularly for peeling the nuts. In addition, many kernel exporters started to lease unused factory premises for a certain period in which the leasing company would take responsibility for employing the labour. As one interviewee (Kollam, 23 May 2014) explained:

When the industry is not doing well and some owners have suffered setbacks, they don't have finance to buy raw material, then they will give their factories on lease to other people, to strong players in the industry. ... There are some people who are not interested in taking bank loans and things like that. Then they have one, two factories, they give it on lease, people who don't want to take the headache of actually doing the business.

As a result, those who own the factory premises, those who own the cashew nuts and those who take responsibility for labour and hygiene standards are frequently different people. The kernel exporters often only play a coordinating role in the network structure of the rather fragmented activities associated with processing cashews in South India. In other words, they neither own nor directly control the processing steps. While it was impossible to ascertain exactly how many factories in Kanyakumari operated on a lease or commission basis, a factory manager in Tamil Nadu claimed that they all did (interview, Kanyakumari, 19 July 2014).

In addition, horizontal inter-firm trade between cashew processors has become customary and many Indian factories rely on purchasing processed kernels from their competitors and exporting them under their own name. Sourcing from a network of 'collaborating competitors' allows processors to react more flexibly to market demands in relatively short lead times. 'There are a lot of processors who sell to exporters like us. Like when there is a shortage, I go out to buy some grades, people would be there able to supply' (interview, Kollam, 22 May 2014).

Such practices significantly limit the ability of Northern kernel buyers to monitor product and process specifications along their supply channel. Whereas Northern kernel importers attach increasing importance to food safety, quality and traceability, subcontracting the labour-intensive processing steps, using home processing, factory leasing and horizontal inter-firm sales hamper the monitoring of such standards in India. As one interviewee (Kollam, 22 May 2014) noted:

At houses, how do you control quality? How do you control safety, food safety? ... When a buyer comes for an audit, a quality audit, then you cannot tell them 'OK, this much cashew is processed at these houses.' You know, they go there and see some unhygienic environment and they go crazy.

Hence, the Northern kernel buyers' control often ends in the Indian exporters' packing centres. In fact, audits and certification by food safety management systems might be restricted to only some of the processing steps. This was confirmed by the managing director of a processing company (interview, Kollam, 28 July 2014) who stated that:

As of now, the system is that only the packing centres are certified under ISO 22000 or HACCP. But one packing centre may have a cluster of something like 12 to 15 processing units supplying that packing centre. So those units will not really be, maybe one or two will, but not all of them will be certified. ... In fact, I am not sure if there is anyone in India who has ISO certification for their entire operations.

Still, Indian processors can largely meet Northern buyers' food safety concerns in a 'kill-step' just before shipping. As one interviewee (Kasaragod, 3 June 2014) said:

There are issues because of the fragmentation. ... [But] I don't think that any-body got blacklisted yet. ... The concern is bacteriological and insects. So, bacteria, just before packing it is re-treated. ... It's not a big problem. You heat it to 80 degrees for three hours. At 60 degrees most bacteria, 95–99 per cent, are supposedly killed.

As a result, the handling of RCNs prior to their final processing is of secondary interest to kernel buyers. For a long time, standards for processed kernels have largely been limited to the measurability of the nuts' physical properties. The most widely accepted AFI standard, for example, distinguishes between the diverse sizes and colours of whole and broken kernels. Recent food safety regulations in Northern end markets, however, have significantly raised supply-chain visibility requirements, thus increasing demands for traceability and third-party verification along the cashew value chain. EU traceability standards oblige all actors in the cashew GVC to document 'one step' upstream and downstream. Furthermore, food-safety

specifications in EU markets encourage some cooperation between kernel exporters and their buyers to guarantee a management system for food safety and risk control (Fitzpatrick 2014).

Similarly, in US markets the enactment of the Food Safety and Modernization Act (FSMA) in 2011 obliged US kernel importers to take preventive measures by verifying the implementation of a food safety system in their supply base. By insisting that food suppliers to the USA register and keep records, the US Food and Drug Administration (FDA) has effectively extended its jurisdiction to overseas processors. Anticipating these regulations, US importers increasingly demand third-party verification from suppliers and there is anecdotal evidence that HACCP and ISO 22000 certification will soon become the minimum requirement for exporting cashew kernels to US markets. This is accompanied by increasing demands for pasteurization as a 'kill-step' in cashew processing to provide better protection against microbiological contamination. How-ever, since the rules for the implementation of FSMA were only finalized in 2015, current import practices are still characterized by considerable flexibility.⁸

4.7 RCN trade between India and Ivory Coast

The trade of RCNs does not follow standards set by any international body. As RCNs are a largely undifferentiated commodity with only minor differences across countries and regions, commodity specifications play a subordinate role (interview, Kollam, 4 April 2014). However, quality is measured at different levels of the RCN channel (most importantly before and after shipment) according to agreed procedures. These include the determination of the kernel outturn ratio (the quantity of acceptable kernels in an 80-kilogram bag after shelling), the nut count per kilogram (as a measure of the size of the kernels), foreign matter content and the moisture level of the nuts.

It is important to consider the procurement strategies of Indian cashew processors and the resulting inter-firm relations in the Indo-Ivorian RCN channel in the context of high price fluctuations. Because the cashew industry lacks transparency, it is highly prone to myths and rumours (Fitzpatrick 2012). These translate into highly volatile prices, which in turn increase the probability of contract breaches. As one respondent (interview, Kollam, 6 June 2014) explained:

What happens in the market is that default is happening from both sides. Sometimes some African exporters, they default. If the prices go up they don't deliver. But

⁸ Information primarily based on the panel discussion 'Meeting kernel buyers' requirements and food safety law compliance' at the World Cashew Convention, 18–20 February 2016, Dubai.

similarly, the smaller companies in India, if prices go down, even though they have a contract, they don't take the cargo or don't pay on time.

As a result, inter-firm relations are characterized by continual disputes, mutual suspicion and deep distrust, which the absence of any effective dispute resolution mechanisms merely reinforces. Nonetheless, the Indian processors have adapted their procurement strategies accordingly and, in the last decade, the Indo-Ivorian cashew value chain saw many examples of vertical integration (both forward and backward) between traders and processors (interview, Abidjan, 16 May 2015). Several Indian processors have set up trade offices, which by preference they register in Singapore or Hong Kong, to access and transfer working capital under preferential conditions. Similarly, some RCN traders started to engage in cashew processing. As one interviewee (Kasaragod, 3 June 2014) said:

It's all about managing your risk. ... One of the reasons why somebody gets into processing will be that he got stuck with the raw cashew. And the market can go either way. It can go down also and if he sells it, he is making a loss. ... So he does processing, so he can recover something.

The opportunity to process the nuts in India on a lease or commission basis made it possible for traders to enter the industry relatively spontaneously and without owning factory premises. One interviewee (Bondoukou,16 June 2015) recalled the progress of a trader to one of India's biggest processing companies:

In 2010 or 2011, they have imported cashew to Mangalore. ... They purchased high and they put it in their warehouse but unfortunately what happened, the international market went down. Automatically the price of raw cashew nut also went down. So they were unable to sell that product. So, what they did ... some factories they took for lease, some factories they took as a toll factory and they started processing.

A second development has been the expansion of spot market transactions. Whereas long-term contracts were widely used a decade ago, the risk of defaults resulted in a preference for spot markets over forward contracts. As one Indian cashew processor (interview, Kollam, 17 May 2014) noted:

Both the import [of RCNs] and the export [of kernels] have now become largely a spot market business. Only some, a small percentage of the trade, is done on a longterm basis, with contracts. ... Earlier, it was not so much of a spot market. Now it is mostly spot because of defaults. I mean, what is the point in signing a contract for December if you don't know what will happen?

Hence, the risk presented by fluctuating prices and the absence of effective arbitration mechanisms has introduced two contradictory developments into the link between RCN exporters from Ivory Coast and Indian processors – vertical integration and increasing back-to-back business.

4.8 RCN trade within Ivory Coast: from farms to port

The governance structure of the RCN procurement channel in Ivory Coast, from farm gates to port, is mainly shaped by commodity specific properties. These include a relatively low valueto-weight ratio, a geographically dispersed cultivation area, and seasonal variations in the availability of raw nuts (cf. Gibbon 2001). The geographical spread of cashew farms makes it difficult for processors to procure demanded volumes directly from producers and no single trader has the capacity to fulfil this function. A discontinuous supply pattern means that processors source their whole annual demand during the harvesting season, which in Ivory Coast only lasts from February to May. The need to procure large volumes in a limited time requires traders to coordinate a broad number of supply sources, thus resulting in a procurement channel structured around several tiers of traders. Inter-firm linkages within Ivory Coast are primarily based on informal, seasonal contracts, which create unstable business relations characterized by frequent defaults. However, most village traders require pre-finance to pay farmers on the spot, which is why the procurement strategies of RCN exporters offer a tradeoff between the risk of losing pre-finance (in the case of advancing working capital in closer buyer-supplier relations with village traders) and the risk of not receiving any RCNs (in the case of purely relying on spot market transactions).

Since the profitability of cashew traders depends largely on volumes, a few powerful commodity traders dominate the Ivorian RCN exporting sector. Given that many of these companies are registered in Asian financial hubs, access to credit on preferential terms is a major source of competitiveness and market power. As one interviewee (Kollam, 21 May 2014) explained:

They are buying the nuts and then they speculate. ... That is killing the market actually. It is not a free market. ... What happens is, for example a big company, say a very big global company comes into the industry, they take whatever quantity is available and countries that are depending on that supply, their chain of supply is disrupted, because he is not willing to sell it at a specific price. If it was a free market anybody can go buy the quality he wants.

⁹ Traders can be grouped into (1) exporting companies with seasonal activities in the cashew sector (almost always associated with an Indian processor) and (2) companies with year-round activities. The second type tends to operate in a variety of agricultural sectors and dominates cashew exports from Ivory Coast with global companies such as OLAM or ETG.

In sum, the multi-tiered RCN channel in Ivory Coast, and the subcontracting of processing activities in South India, complicate the monitoring and enforcement of product and process standards for a single actor along the entire chain. ¹⁰ Instead, the cashew GVC is characterized by a bipolar governance structure comprising two distinct segments. On the one hand, the kernel buyers who drive the trade between Indian factories and Northern end markets are attaching increasing importance to food safety and quality, but their power to control the chain often ends at the packing centres of the Indian exporters. On the other hand, the international commodity traders who coordinate the RCN supply between the Ivorian farms and the Indian factories drive the RCN channel between India and Ivory Coast. Their dominant position mainly derives from the large amount of working capital needed to collect the raw nuts and to pre-finance a network of smaller traders during the season.

These two subsystems of governing the cashew GVC imply very different forms of entry barriers to the chain. Exporting processed kernels to Northern end markets requires compliance with increasingly strict legislation on food safety and quality, often verified by external certification schemes. The barriers to entering the RCN trade in upstream markets, by contrast, are much lower and RCN traders' commodity specifications and control mechanisms appear to be less demanding.

4.9 Upgrading prospects in the Indo-Ivorian RCN chain: learning by exporting?

The dominant role of commodity traders in 'driving' the upstream end of the cashew value chain has major implications for product and process upgrading of RCN production, as well as for the functional upgrading of the Ivorian cashew sector into processing.

Product and process upgrading of RCN cultivation

Being an undifferentiated commodity with relatively lax quality requirements, the control mechanisms over product specifications are of little importance and initial entry into the trader-driven RCN chain is significantly lower than that of the buyer-driven one in downstream markets. This implies that lower levels of cooperation and fewer investments in supplier capabilities are required to sustain inter-firm relations. For example, while the post-harvest handling of RCNs, particularly proper drying, has a significant impact on the quality of the nuts, traders rarely invest in drying yards at the village level. The Ivorian Cotton and Cashew Council

¹⁰ Only one trading company has fully integrated its operations, with direct linkages to Ivorian farmers, processing units in Ivory Coast and India, and warehouses in Europe.

(CCA) recently introduced a maximum moisture level of 10 per cent for RCN exports from Ivory Coast, but since the humidity is primarily determined during the post-harvest drying, this standard does not necessarily require tighter chain coordination by traders. Besides, producer-level investments are mainly hampered by hold-ups arising from weak contract enforcement. Cashew farmers who receive support for quality improvement might decide to sell their high-value produce to another buyer. An Ivorian RCN buyer stated that for this reason he terminated his agreement with a local NGO to train farmers in post-harvest techniques (interview, Bouaké, 8 June 2015). At the same time, village-based traders rarely pay quality premiums for properly dried nuts. Hence, loose chain linkages within Ivory Coast provide little incentive to upgrade the quality of the product.

Functional upgrading of the Ivorian cashew industry

Functional upgrading of the Ivorian processing sector implies disengagement from the 'trader-driven' RCN channel and, instead, direct participation in the 'buyer-driven' chain. This requires overcoming major constraints, especially access to finance, RCNs, technology and the knowledge on factory management needed to meet the Northern buyers' food safety requirements.

There is little indication that vertical chain linkages provide the basis for organizational learning or spillovers of knowledge and technology from India to Ivory Coast. As farmers and (primarily Indian) RCN exporters are mostly linked through intermediaries during the harvesting season, direct linkages between Indian processors and Ivorian farmers are non-existent. The rapid emergence in recent decades of new processing factories in South India, by contrast, has been closely linked to interactions with established companies. The owner of an old family-run processing company explained (interview, Kollam, 29 July 2014) that:

Most of the other now big processors were roasting for us earlier. ... Or they were supplying us raw cashew. Or they were doing job work. They built a factory, but we were supplying them raw cashews, taking back the kernels. So, they found out more about cashew from the older companies. Not that they didn't have the money, they had the money but they didn't have the know-how to do it. All these older companies taught these people how to do it.

Furthermore, there are many examples in South India of cashew farmers who started processing their own nuts before selling them to local factories. For example, farmers and villagers in the municipality of Panruti, Tamil Nadu, have invested in processing machinery, such as steam boilers, which they also rent out to other farmers. This functional upgrading is facilitated by direct links between processors and farmers, which allow the latter to benefit from larger processors' knowledge and distribution channels.

However, despite the absence of direct linkages to Indian processors, the capacity of Ivorian cashew factories has expanded rapidly over the last five years and is now about six times higher than it was in 2011 (Ricau 2014). Only one of the approximately 25 Ivorian processing companies originates from India.

While many Ivorian processors acquired the financial means to start their businesses through exporting raw materials (including RCNs), not one of them claimed to have learnt about kernel processing through their export linkages. In fact, more than 80 per cent of the interviewed processors had received their technical proficiency from an Ivory Coast support agency, usually the NGO TechnoServe. Headed by an Indian national with extensive experience in cashew processing, TechnoServe advises on factory management skills such as accounting or batch processing, importing and installing machinery, and training workers. It also offers support for the certification of factories to comply with buyer demands. For example, the business association African Cashew Alliance (ACA) created the ACA Quality & Sustainability Seal, which verifies adherence to quality, food safety, social and labour standards in line with the US Food Safety Modernization Act (FSMA). In 2013, the first Ivorian processor became certified with the ACA Seal.

Furthermore, in 2013 the Ivory Coast Cotton and Cashew Council (CCA) was mandated to enhance regional value capture by increasing the conversion rate of national RCN production to 100 per cent by 2020 (ACA 2014). Set up by the Ivorian Ministry of Agriculture, the CCA is composed of government representatives and various industry stakeholders and, since its inception, has initiated several support schemes to overcome technological limitations. In 2014, it organized its first international exhibition of cashew processing equipment and technology (SIETTA). In the same year, it signed a memorandum of understanding with the Vietnamese Cashew Association (VINACAS) under which Ivory Coast agreed to give Vietnam priority access to its RCN production in exchange for processing technology and technical assistance. As the world's second largest processor of cashew kernels, Vietnam is the number two export destination of Ivorian RCNs. However, Vietnam relies much more on mechanization than India does. In 2015, the CCA, the Vietnamese Polytechnic University of Ho Chi Minh City and the Institut National Polytechnique Houphouet Boigny (INP-HB) jointly established a cashew processing technology centre in Yamoussoukro to assist cashew factory start-ups with machinery and to train factory staff (ACi 2015a).

Apart from access to knowledge and technology, the huge amount of capital needed to build up an annual RCN stock during the harvesting season is a major problem for cashew factories. This became obvious during the 2015 season, when RCN prices more than doubled. Since Ivorian banks are reluctant to finance local processors (usually because they have

insufficient collateral and no operational history), the Ivorian factories are unable to compete with the Indian RCN traders over the raw material and, consequently, less than 50 per cent of the installed capacity of Ivorian processors was utilized in 2015. To overcome their financial limitations, Ivorian processors have made several suggestions to the CCA, including introducing a priority buying window to allow Ivorian processors to purchase RCNs at the beginning of the season before the Indian RCN exporters enter the scene. Furthermore, the installation of a publicly funded credit guarantee facility has been proposed to provide banks with the collateral required to finance the cashew industry (interview, Abidjan, 28 May 2015).

4.10 Concluding remarks

This article seeks to contribute to a better understanding of governance structures in South-South value chains and of related upgrading opportunities for the suppliers of raw materials. The evidence from the cashew industries in India and Ivory Coast points to a bipolar governance structure of the cashew value chain consisting of a trader-driven segment between Ivorian farms and Indian processors, and a buyer-driven segment that links processors to Northern end markets. The underlying factors that account for the emergence of these two value chain subsystems differ from those of former studies on bipolarity, in which rivalry between Northern firms in agri-food chains (such as banana-MNCs vis-à-vis retailers) primarily determined the governance structure. The structural pattern of the cashew value chain, by contrast, is best comprehended through a combination of industry factors, both internal and external to the value chain, which either complicate lead firms' control along the chain or render it redundant. Being a relatively undifferentiated commodity, quality specifications for RCNs are of secondary interest and traders have little incentive to monitor upstream activities. A geographically dispersed and irregular RCN supply led to the emergence of a multi-tiered value chain in Ivory Coast dominated by financially strong traders able to pre-finance transactions. On the other hand, Northern buyers attach increasing importance to food safety and quality attributes, often verified by third-party certification bodies. However, fragmented processing activities in India restrict the ability of Northern buyers to monitor product and process parameters prior to packing centres.

The uneven proliferation of industry standards along the cashew value chain are in line with the assumption that buyer-driven chains with consolidated retail power coincide with stricter food safety and quality standards as opposed to more fragmented value chains. Overall, the bipolar structure of the cashew value chain reflects the divide between North–South trade of quality sensitive products and South–South trade of an undifferentiated raw material.

The bipolar governance structure of the cashew value chain has major implications for the upgrading prospects of the Ivorian cashew industry. Functional upgrading into processing requires integration into the buyer-driven chain segment, characterized by higher entry barriers related to quality and food safety requirements. Commodity traders neither set incentives for quality-related upgrading of raw nuts nor offer knowledge and technology-related spillovers. Furthermore, a competitive division of labour between Ivory Coast and India is likely to result in a 'win-lose' competition over processing activities. Hence, the future of the cashew processing industry in Ivory Coast will mainly depend on institutional efforts to provide the conditions under which knowledge, technology and finance become accessible.

Chapter 5: Loose coordination and relocation in a South-South value chain: cashew processing and trade in Southern **India and Ivory Coast**

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5.1 Introduction

Global value chains (GVC) link a wide range of regions worldwide. Whilst North-South chains, coordinated by northern lead firms, have long been a predominant research focus, little is still known about South-South linkages of firms (Murphy 2008). This is all the more surprising as 'southern engines' such as India, China, Brazil or South Africa have recently gained increasing competitive power (Gereffi 2014) and extended their production and supply worldwide, including to other countries of the Global South (Horner 2014). More research is therefore needed in order to understand the internal coordination of southern value chains that lack powerful lead firms, and how such chains are shaped by their respective institutional environment.

This contribution focuses on the governance of the cashew value chain of India and Ivory Coast. The central question is how the coordination and relocation of the raw cashew nut (RCN) value chain is affected by changing institutional settings.

In the first part of the article we set out the analytical concept and methodology of the study. Whilst the role of control by lead firms is well documented in studies of North-South value chains, we suggest that loose coordination is a better descriptor of the value chain considered here in the Global South. We also suggest an evolutionary perspective (in a broader sense) in order to better understand the dynamic interplay between changing institutional settings and intra-chain coordination. The empirical part explains the dynamics of chain coordination and relocation in the RCN value chain against a background of changing institutional settings, which here refer to governmental policies in India, in particular labour policies, and industry policies shifting from import canalisation to export promotion. The growth of the Indian cashew sector has led Indian companies to source RCN in Ivory Coast; recent efforts of both governments aim at technological upgrading and are embedded in an institutional field shaped by geopolitics. The last section discusses key findings including unintended but nevertheless tangible effects of these shifting policies.

5.2 Conceptual approach and research gap

From its initial concerns with wider theorisations of capitalism and the international division of labour (Hopkins and Wallerstein 1977), research on global commodity chains and related concepts has shifted towards the analysis of value chain organisation as a determinant of the global economic integration of regions (Coe and Yeung 2015). The introduction of the GVC framework in the early 2000s partly sprang from the need to introduce a common terminology for the various kinds of chain approaches (Bair 2005). Many GVC studies are concerned with understanding the coordinating mechanisms that characterise inter-firm relations in specific industries and sectors, a discussion which led to proposals of various GVC governance typologies (e.g. Gereffi 1994; Gereffi et al. 2005). As GVC literature has largely focused on the dominant position of northern lead firms in controlling their southern supply chains, as well as associated upgrading opportunities in the South, the development of governance typologies has been closely related to such evidence. Recent studies suggest that these empirical insights need to be broadened in particular with regard to South-South value chains (see Kaplinsky et al. 2011; Murshed et al. 2011; Staritz et al. 2011).

We suggest loose coordination as a heuristical approach and define it as the absence of long-term obligations and durable commitments between tiers. Instead of long-term business connections, links connect interchangeable partners. Such flexibility always includes the danger for chain actors to be replaced by competitors. Value chain actors lack the power to exert control over product and process specifications along the value chain; this distinguishes such actors from strong lead firms that exert comprehensive control over the chain (Staber et al. 1996: 16). However, loose coordination remains distinct from pure arm's length relations due to imperfect market conditions, such as lack of transparency and effective contract enforcement mechanisms, giving rise to defaults of payments or contract breach.

Loose coordination is not an exclusive characteristic of South-South value chains (Staber et al. 1996). Neither is it the only governance type in South-South value chains (Coe and Yeung 2015). Still, it does fit a number of industry-specific characteristics which are typical for Southern producers and exporters, such as low technological needs and low entry barriers to the chain resulting in high competition and risk of displacement. In agri-food value chains dispersed and seasonal supply patterns may reinforce loose forms of chain governance (Gibbon 2001).

Recent literature has expressed a need to put stronger emphasis on governmental policies and the role of the state in value chain organisation (e.g. Bhatia 2013; Selwyn 2012; Thomsen 2007). This has been addressed by taking a strategic-relational view of the state as a dynamic and multiscalar actor in the formation and restructuring of value chains (see Smith 2015). Some scholars have applied an evolutionary perspective (Neilson and Pritchard 2009, Oro and Pritchard 2011). Although our study cannot claim to contribute to the core of the evolutionary debate in economic geography (e.g. Boschma and Martin 2010), the evolutionary view, highlighting institutional surroundings and politically shaped market features, seems more suitable for understanding regions of the Global South which have a long tradition of industry policies ranging from export-oriented to import-substitution models, yet often have low effectiveness of control exerted by regulatory bodies (Gereffi 2014). The evolutionary view highlights different ways of adaptation of the subjects involved, such as involuntary adaptation, pro-active change of the institutional surroundings, or the exit option of institutional avoidance (see Cantwell et al. 2010), and helps to analyse the power and weaknesses of the chain actors within their institutional environment.

5.3 Method

The method chosen for this study is qualitative and explorative. This approach is best suited to uncovering the kinds, drivers and conditions of value chain restructuring. Qualitative approaches also help to access sensitive information by facilitating shared understanding between the interviewee and interviewer. Semi-structured interviews with cashew industry representatives were carried out in Ivory Coast and India mainly in the states of Tamil Nadu and Kerala) between 2014 and 2015. In India, these comprised conversations with representatives of 45 cashew processors (including registered companies as well as informal factories), two trading companies, three cashew brokers, one labour union as well as two meetings with the Cashew Export Promotion Council of India (CEPCI). A total of 18 cashew factories were visited. During the research stay in Ivory Coast conversations with nine farmers, 16 cashew traders, 19 processors as well as three interviews with representatives of the Ivorian Cotton and Cashew Council (CCA) were conducted. Smaller processors and the cottage industry in Kanyakumari were approached with the help of a local NGO (CADRE India). In Ivory Coast, the African Cashew initiative (ACi) and the CCA provided contacts and logistics.

Generally, the interviews took between 20 and 150 minutes and were audio-recorded if permission was given by the interviewee. Local language translators were partly involved at the village level, particularly during conversations with Ivorian farmers and with representatives of the Indian cottage industry. Recorded interviews were transcribed, skipping irrelevant parts of the interview. Collected data were cross-checked by interviews with two NGOs. Observations and field notes complemented the investigation. Bibliographical data and

secondary literature were collected from public and private institutions, such as the Indian Directorate of Cashew Nut and Cocoa Development, the CEPCI, and CCA which also provided internal documentation.

5.4 Loose coordination and relocation in the cashew value chain

This section first shows the different tiers within the value chain (4.1) followed by a short overview of the physical process of RCN production and trade (4.2). We then focus on the development of loose organisation and relocation of cashew processing within Southern India (4.3). Next, we show how the Indian industry policy changed from import canalisation to export promotion and how this, linked to technological advancement, led to growth of the cashew industry and a related demand for raw cashew nuts (4.4). This brings Ivory Coast into the game. Part 4.5 shows forms of loose coordination also at the level of RCN procurement within Ivory Coast.

5.4.1 The value chain of RCN production and trade

Apart from being a major exporter, India is the world's largest consumer of processed cashew kernels, particularly of pieces and brokens (Foretell 2014: 12). Hence, domestic retailers and cashew exporters represent the end of the value chain observed in this study. The cashew industry has become one of India's major sources of foreign exchange and employment.

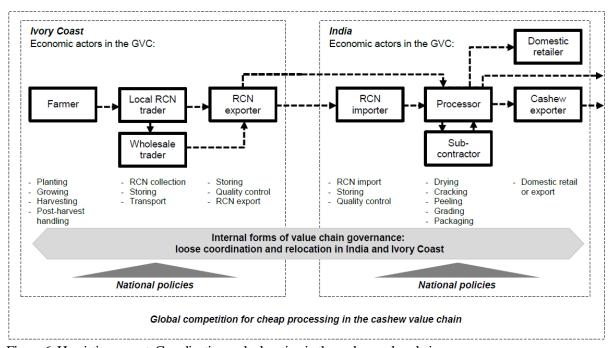


Figure 6: Heuristic concept: Coordination and relocation in the cashew value chain

The Indian state of Kerala is known as the world's leading processing centre for cashew kernels (Kannan 2002), with a high degree of dependence on RCN imports, particularly sourced from Ivory Coast. The different tiers of cashew production and trade are shown in Figure 6. The figure also highlights that the chain is shaped by global competition for cheap processing and governmental policies.

5.5 RCN processing and trade

Transforming a raw cashew nut into an edible kernel involves a wide range of activities. Drying, roasting and cracking of the nut is necessary before the kernel is separated from its shell, peeled, dried, graded and finally vacuum packed for export markets or local consumption. Fully automated cashew processing is the exception in India and Ivory Coast; most factories use manual and semi-mechanised processing (Photos 1-3).



The machines and tools are quite simple. In Tamil Nadu, nuts are often cracked by workers sitting on the floor using a stick or stone. As all these steps are highly labour-intensive, the development of the cashew industry has been closely linked to the availability of cheap labour. A further relevant cost factor for the processors is the large amount of working capital needed to purchase raw cashew nuts, which has to be pre-financed during the **RCN** harvesting season. Hence processing characterised by low technological needs, low entry barriers and seasonal supply patterns.





Photos 1-3 Semi-mechanised and manual cashew processing in India (Photos: J. Tessmann)

5.6 Labour policy, loose coordination and relocation in Southern India

Loose coordination and relocation of the Indian cashew industry already began during colonial times. In its initial phase, the Indian processing sector was dominated by a small number of indigenous entrepreneurs (Lindberg 2005). Most of these early cashew processors were located in the Kingdom of Travancore, which until 1945 covered most of the territory now known as Kerala. Early cashew processing relocated to Travancore to escape British Indian labour law which had regulated working hours and child labour since 1881 (Eapen et al. 2004). In 1946, processing units in Kerala were officially declared as 'factories', obliging employers to comply with a wide range of regulations that were introduced during subsequent years (Harilal et al. 2006). These comprised a legal minimum wage for factory workers (1952) and several social welfare schemes (Eapen et al. 2004).

When this legislation began to threaten Kerala's cheap labour base, firms started to adopt various strategies to reorganise their processing activities. Loose coordination and relocation within India were the methods of choice. During the 1960s, many processing companies began to close down their factories on a cyclical basis to artificially create a seasonal workforce which was not subject to labour regulations (Lindberg 2005). Lease processing also became a common practice of value chain coordination, i.e. to lease factory premises that were not in use yearround (Interview, Vishakapatnam, 08 July 2014); in this case the leasing company is responsible for employing and paying for labour.

Moreover, subcontracting offered opportunities for relocating the value chain. Cashew kernel exporters commissioned external processors to process the nuts on their behalf in a cheaper state, in particular in Tamil Nadu where the minimum wage was much lower compared to its neighbouring state and where labour unions lacked the organisational capacity to safeguard work standards (Interview, Kollam, 07 June 2014). This practice is also referred to as toll processing.

The trend of relocation was further stimulated by changes in the regulatory environment. Increasing subcontracting of labour-intensive activities in the Indian cashew industry was accompanied by the rise of an informal labour force working from home, particularly for peeling the nuts. After the government of Kerala banned the practice of "home processing" in 1967, many factories relocated their activities to the neighbouring state of Tamil Nadu (Srinivasan et al. 1999). Many factories were built right on the other side of the border. Even though the cashew industry in Kanyakumari began as a temporary arrangement during the 1960s to evade labour regulations in Kerala (Eapen et al. 2004), today the majority of cashew factories in Kanyakumari are still supplying firms in Kerala, with some companies working entirely on a commission basis without owning any factories (Interview, Vishakapatnam, 08 July 2014). Hence, loose coordination and relocation largely emerged as a response to political settings.

5.7 Industry policy in India: from import canalisation to export promotion

The exodus of factories from Kerala led to a decline in the availability of raw nuts in Kerala's factories, as a great share of local RCN production was transported to factories in neighbouring Tamil Nadu. Consequently, the state government of Kerala started to intervene with industrial policy, first with rigid trade regulation and nationalisation which later changed to liberal instruments of industry promotion.

In the 1970s the Kerala state government imposed a number of far-reaching regulations. The Kerala State Cashew Development Corporation (KSCDC) was set up to run publicly owned processing factories and take over private ones which had been shut down, effectively nationalizing private factory premises (Interview, Kollam, 23 May 2014). At the same time the government imposed a legal prohibition of RCN cross-border movements to neighbouring states in an attempt at allotting the locally cultivated nuts to Kerala's own processing industry. In 1979, the Monopoly Procurement Scheme was initiated which exclusively authorized the KSCDC for the procurement of RCN and their distribution to cashew factories. This was done on the basis of a cashew factory's number of workers, meaning that larger factories were granted preferential access to RCN (Interview, Kollam, 28 July 2014). Also, the import of RCN became regulated through the Cashew Corporation of India (CCI) which was constituted as a state-owned trading company. The CCI was exclusively licensed to import RCN from outside India, which at that time was mainly sourced from East Africa.

With India's liberalisation in the 1990s, and after the channelling of RCN imports by the CCI was removed and the Monopoly Procurement Scheme ended, industry policy changed. The Cashew Export Promotion Council of India (CEPCI) played a vital role in this. The CEPCI offers a range of services to kernel exporters, including the provision of contacts to buyers, arbitration of disputes with kernel importers and assistance with quality certificates. Members of the CEPCI are entitled to consultancy services and financial benefits for process and product upgrading, including monetary assistance for the automation of cashew factories. Hence, technological upgrading became part of recent industry policy.

In addition, the CEPCI plays a central role in voicing private sector concerns to policy makers. In this function it urged the Union Government to take measures against imports of processed cashew kernels (Interview, Mangalore, 02 June 2014); consequently, in 2013, India's import duty on imported kernels was raised to 46.5 % (Kulkarni 2013; Pereira 2013). Indian cashew processors are also eligible for several public support schemes. Importers of RCN profit from a duty drawback on RCN imports, while exporters receive incentives under the Special Agriculture and Village Industry Scheme (VKGUY), the Focus Market Scheme (FMS) and the Special Focus Market Scheme (SFMS). In total, these offer "duty credit scrips" of up to 13% of the F.O.B. value of exported cashew kernels. Scrips can be used to pay import duties or, considering the absence of an import duty on RCN, they can be sold to any other company (Interview, Kollam, 06 June 2014). Furthermore, cashew exporting companies can access bank loans at preferential interest rates (Interview, Kollam, 16 May 2014). In sum, industry policy was increasingly geared towards facilitating cashew kernel exports, ensuring raw cashew nut supply and protecting the Indian consumer market against imports of processed cashew kernels.

5.8 Ivory Coast: loose coordination of raw cashew nut exports to India

As the stagnant RCN production in India could not meet the growing demand of the domestic cashew industry, Indian processors became increasingly dependent on RCN imports in the 1990s. The Ivorian cashew sector is relatively young and cashew cultivation only began in the 1950s. During the 1990s cashew production began to reach significant volumes; in 2011 Ivory Coast became the world's largest exporter of RCN. The Ivorian processing industry, however, is still in its infancy and around 90 per cent of the local RCN production is exported unprocessed. More than half of the exported raw nuts are shipped to Indian factories before reaching supermarket shelves across the globe (ACA 2014).

Local village traders, so called 'pisteurs', collect raw nuts from the large number of geographically dispersed farms and sell them to traders and intermediaries (Figure 7). This procurement channel is characterized by very loose forms of coordination with changeable partners and a prevalence of informal agreements rather than formal contracts. Although processing companies attribute particular importance to the quality of RCN, expressed in their kernel outturn ratio, humidity and size, this is not comparable to global standards for food safety, quality and traceability (Interview, Kollam, 05 May 2014). Most of the farmers interviewed stated that "pisteurs" would therefore only pay a fixed price per kilo RCN regardless of quality.

At the same time, inter-firm relations along the cashew value chain are strongly affected by the volatility of RCN prices. Initially, the absence of an official reference price for RCN in the West African cashew sector – also referred to as the "Wild Wild West" – offered unique opportunities to traders. Soon, the chain linkages became highly adversarial and risky: If the RCN price rises after the conclusion of a contract, RCN exporters have strong incentives to default and deliver their nuts to another trader/processor in India who pays more. If prices fall, Indian importers might decide to renegotiate contract specifications or refuse to accept the load on arrival (Interview, Kollam, 06 June 2014).

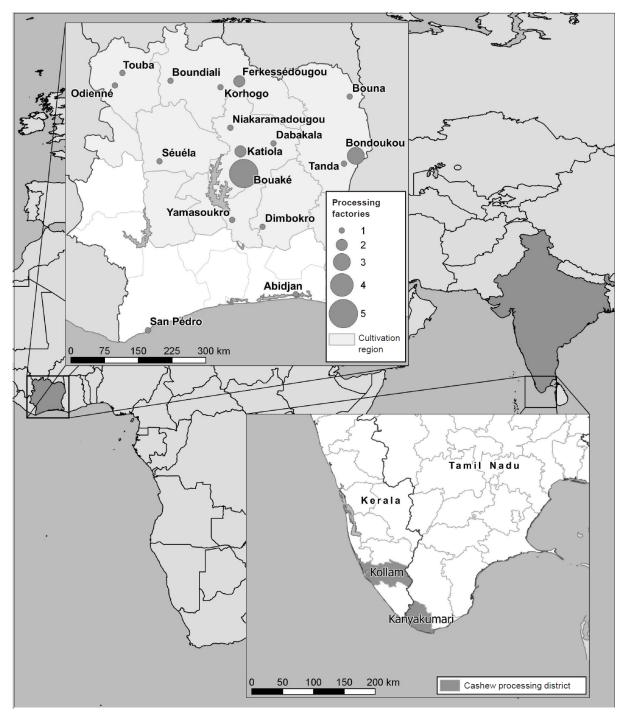


Figure 7: Map of RCN production and processing in Southern India and Ivory Coast

In order to mitigate the risk of defaults, the actors in the value chain have adapted their business strategies in different ways. For example, the RCN channel between Ivory Coast and India has shown many cases of vertical integration (both forward and backward) since the 1990s, which respond to this uncertainty and represent efforts to stabilise otherwise loose ties (Interview,

Kasaragod, 03 June 2014). Thus, many Indian processing companies started to engage in RCN exports from Ivory Coast by setting up their own trade offices, preferably registered in Asian financial hubs such as Singapore or Hong Kong. Similarly, RCN traders sometimes integrated processing activities. However, once again commissioned work (toll processing) made it possible for some traders to enter the processing industry without building their own factory (Interview, Bondoukou, 16 June 2015).

In addition, Indian processors that procure their RCN from external trading companies increasingly relied on spot market transactions instead of longer-term contracts, as was common in earlier days (Interview, Kollam, 17 May 2014). Here, in the absence of effective external arbitration mechanisms, the Indo-Ivorian value chain has responded to the challenges of opaqueness and risks with internal restructuring.

Recent policy interventions in Ivory Coast began to address the lack of market transparency with the ultimate aim of fundamentally reorganising the sector. In 2013, the regulatory authority for the Ivorian cashew and cotton sector ARECA (Autorité de Régulation du Coton et de l'Anacarde) was replaced with the Council of Cotton and Cashew Nuts (CCA). Constituted under the Ivorian Ministry of Agriculture, CCA was charged with a wide range of responsibilities to enhance production volumes and quality of RCN, to increase incomes of cashew farmers and to ensure a transparent and reliable marketing system. In addition, CCA aims to increase local value addition through RCN processing and has a target of a conversion rate of 100 per cent of the national RCN production by 2020. While these developments are very recent, it can be expected that such regulations will alter the internal coordination of the RCN value chain significantly as the new system has been described as an attempt to "regularise" the random marketing process" (Interview, Abidjan, 14 May 2015).

Ivorian policies also target technology and know-how to promote the local processing industry. In order to promote the transfer of technology to Ivory Coast, CCA initiated an international exhibition of cashew processing equipment and technologies in 2014 (SIETTA). The same year, CCA signed a memorandum of understanding with the Vietnamese Cashew Association (VINACAS), as Vietnam is the world's second largest processor of cashew kernels and, next to India, a major supplier of processing technology. In the memorandum, Ivory Coast agreed to give Vietnam priority access to its RCN production in exchange for the transfer of processing technology and technical assistance. With the support of Vietnamese technology providers, CCA currently plans to set up a cashew processing training centre in Yamoussoukro. Several developmental NGOs are also striving to improve technology standards in Ivory Coast and provide consultancies both on the farm and at factory level. This illustrates that national modes of regulation cannot be seen as stand-alone entities but are embedded in international geopolitics.

Although successful upgrading of the Ivorian processing industry would negatively impact on RCN imports to India, Indian processors hesitate to invest in Ivory Coast as the country is considered high risk. Only one company of Indian origin has built a factory in Ivory Coast to date. In contrast to the Indian processors, which have matured over generations and which have largely been disapproving of government interventions in the cashew sector, Ivorian cashew stakeholders widely agree that the success of the local processing industry will largely depend on further political efforts in the areas of sector organization, access to technology and finance.

5.9 Discussion and conclusion

The study illustrates an example of a South-South value chain with relatively weak actors that lack control over larger parts of the value chain. The recent RCN value chain and its development features different kinds of loose coordination, both at the level of cashew processing in India and in the RCN procurement channel in Ivory Coast. Loose coordination, however, not only results from the sector specifics that characterize an agricultural value chain (Dannenberg and Kulke 2014). In this study, the dynamics of the various forms of loose coordination are mainly driven by changes in institutional environments. These environments consist of multiscalar political bodies (see Smith 2015) encompassing the federal and state governments of India and the Ivorian government; these are further embedded in international developmental policies, in particular geopolitics that promise technological upgrading (Carmody 2013: 71-89).

The evolutionary perspective chosen here offers insights into the impact of governmental policies on value chain organisation, which might not be the intended impact. Indian labour regulation was of limited success whilst Indian industrial policy successfully promoted the growth of the cashew sector. The effects of recent efforts to upgrade cashew processing in India and Ivory Coast cannot be predicted. So far, there is no evidence for loose coordination changing into more reliable and solid relations between the tiers. While Indian and Ivorian farmers are place-bound and unable to escape the changing settings, processors and traders can evade political control by reorganisation and relocation. This kind of evolutionary adaptation to the environment is based on locational and organisational retreat, in this case institutional avoidance (Cantwell et al. 2010). Still, although these actors in the chain can escape political regulation, they are not proactive lead firms with control over the value chain. Rather, they are vulnerable actors themselves that are responding to external institutional changes.

Chapter 6: Global value chains and policy practice: The making of linkages in the Ivorian cashew industry

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6.1 Introduction

During the last decade, the global value chain (GVC) framework has gained prominence among policy planners as a tool for promoting economic development. Spurred by the academic literature (e.g. Baldwin 2014; Gereffi and Sturgeon 2013; Wade 2016) and publications of international organisations (e.g. Elms and Low 2013; Miroudot et al. 2013; Taglioni and Winkler 2016), governments and development agencies have started gearing their policies towards GVCs. A central assumption of GVC-oriented policies is that improved buyer-supplier linkages will translate into mutual benefits among GVC actors; for this reason, GVC interventions are often framed as "win-win" measures, capable of reconciling the interests of different industry stakeholders (Franzel et al. 2015). Such synergistic linkages have become a focal point for resource-based industrialisation strategies and served as a justification for including global lead firms as "strategic development partners" in the agenda of policy planners (Neilson 2014).

However, a controversial debate has emerged surrounding the implications of the 'value chain turn' in industrial policy¹¹. On the one hand, GVC-oriented policies have been described as 'third way' between market liberalism and state-led approaches (Werner et al. 2014), shifting the state's policy focus from 'picking winners' to reconciling private sector interests (Yeung 2014). On the other hand, scholars have argued that the value chain terminology itself simply serves as a label to advance the neoliberal agenda (Fernández 2014). In particular, scholars have criticised GVC interventions for their preoccupation with inter-firm relations, claiming they fail to address the wider structural and macroeconomic constraints faced by suppliers in upstream markets (Cramer 1999, Lauridsen 2017).

Taken as a whole, the value chain developmental discourse lacks empirical evidence of concrete policy implementations and related developmental outcomes (Neilson 2014). This

¹¹ With reference to Rodrik (2004) I define industrial policies as the use of government resources to shift the economy towards more sophisticated activities with higher productivity. Hence, such efforts are not limited to industry or manufacturing per se but may include agriculture and services.

article addresses that gap by examining contemporary industrial policies in the Ivorian cashew nut industry. The case of the Ivory Coast illustrates how policy planners have adopted the GVC concept in a way that places mutual gains and inter-firm collaboration at the heart of the reform agenda. The article sheds light on the strategic orientation of industrial policies in the Ivory Coast by investigating how value chain thinking has translated into policy practice. Furthermore, the study evaluates the synergistic assumptions which underlie the GVC policy agenda by asking: Who benefits from GVC interventions in the Ivorian cashew industry?

The article is structured as follows. The next part briefly traces the development of the GVC framework from a micro-level approach toward a more comprehensive consideration of the wider institutional environment of GVCs. This will serve to outline the rationale of industrial policies geared towards GVCs and its implications for resource-based industrialisation strategies. After describing the methodology of the empirical part, a further section gives an overview of orthodox policy responses to key challenges in the African cashew industry. This is followed by an in-depth analysis of contemporary industrial policies in the Ivorian cashew nut sector. The final section reflects on the findings with some concluding remarks.

6.2 GVC analysis: From an analytical framework towards a policy tool

Since the 1990s, scholars have been occupied with the organisational structure and development implications of GVCs, most commonly understood as the full range of activities involved in the life cycle of a product. Following Gereffi's (1994) pioneering work, much of the GVC literature has been devoted to identifying the role of powerful lead firms in governing GVCs beyond their own organisational confines. These firms often dominate the value chain by leveraging financial resources (purchasing power) and technical capabilities (competence power) (Sturgeon 2009) in a coercive fashion—for example, by imposing sanctions or price reductions. Asymmetric positions in buyer-supplier bargaining are often rooted in these two forms of power, even if firms are co-dependent (Dalle et al. 2013).

The concept of GVC governance (Gereffi et al. 2005) has been widely applied in an effort to investigate whether suppliers can benefit from GVC participation by moving into higher value activities, referred to as GVC upgrading. This process can take many forms, from efficiency gains ("process upgrading") and product innovation ("product upgrading") to the acquisition of new capabilities ("functional upgrading") and entrance into new industries ("inter-sectoral upgrading") (Humphrey and Schmitz 2002). GVC upgrading can be facilitated by knowledge spill-overs or technical assistance from lead firms to their suppliers, rendering GVCs an important avenue for industrial development and local learning. Lead firms may actively engage in supplier upgrading if it remains in their interest (Swinnen and Vandeplas 2011). In the horticultural sector, such symbioses between buyers and suppliers might exist if higher value tasks, undertaken in upstream markets, improve product quality, consistency or reliability of supply (Dolan et al. 1999). Hence, product and process-related forms of upgrading are expected to be encouraged by quality demands of buyers. At the same time, lead firms may restrict their suppliers to lower value tasks if functional upgrading would encroach on their own core competence (Giuliani et al. 2005; Minten et al. 2009). For this reason, evidence of supplier upgrading along value chains remains to be substantiated. However, GVC scholars continue to assume that buyers play a constructive role in the process (Pipkin and Fuentes 2017).

While GVC scholars are primarily concerned with how governance and upgrading have contributed to a better understanding of the ways GVCs can open opportunities to developing countries' firms for skill building and technology acquisition, the political economy of GVCs initially received little attention. In fact, the GVC framework and related concepts have been established with the aim of overcoming state-centric analytical approaches (Horner 2017) which has led to a "shift in focus from the state to the actors in the chain and their interrelationships" (Sturgeon 2009). As a result, scholars initially criticized the GVC framework for being "extremely short on policy recommendation" (Cramer 1999: 1248). Particularly its narrow focus of the upgrading concept on the micro-level of the firm led to calls for a stronger incorporation of the wider institutional environment into the GVC framework (e.g. Bair 2005; Selwyn 2012).

During the last decade, a growing number of studies have addressed this gap by investigating the political economies within which value chains are embedded, as well as their importance in upgrading and regional development. This includes an increasing consideration of the regulatory environment of GVCs (Neilson and Pritchard 2009) alongside an acknowledgement that the creation and maintenance of GVCs are an outcome of political choices made by states (Mayer and Phillips 2017). The regulatory role of states has been explored with regard to measures that restrict firm activities in GVCs—for example, through price controls, tariffs and quotas or by setting quality standards (Horner 2017). Arguably the most attention has been paid to the role of the state as facilitator, including matchmaking between local and foreign firms (Thomsen 2007) and the provision of resources necessary for firm upgrading, such as subsidies or technology (Selwyn 2008). Studies in the agro-food sector have shown that state institutions are crucial for translating GVC integration into local value capture (Lee et al. 2012; Fold 2008). Smith (2015) shows for example how free trade agreements accompanied by public technical assistance programs have enhanced market access and facilitated cross-border capital investments that formed the basis of state-led industrial upgrading in Tunisia. However, these facilitative forms of state governance (which enable the functioning of GVCs) might be in tension with regulatory strategies that target to improve the position of individual value chain actors such as workers (Alford and Phillips 2018).

States also play a crucial role in negotiating buyer-supplier relationships, which reinforce or alter power asymmetries along GVCs. Hence, the governance structure of GVCs often results from the intertwinements between economic and political power (Mayer and Phillips 2017). As Dallas et al. (2017) point out, power is not always 'possessed' by firm-level actors but often wielded collectively, through institutionalised arrangements such as governments, multistakeholder initiatives or business associations. These collective 'arenas of actors' (ibid) have opened new opportunities for policy makers to leverage the relative position of local enterprises within GVCs. The following section outlines the rationale behind this type of industrial policy and discusses some of its shortcomings.

6.3 GVCs and policy-making: Utilising linkages for economic development

The insight that upgrading of local firms is largely shaped by the ways how regional and national economies are inserted into GVCs forms the basis of a development model which has been labelled "value chain-oriented industrialisation" (Gereffi and Sturgeon 2013) or "vertically specialised industrialisation" (Milberg et al. 2014). The fundamental difference between this model and former development paradigms has often been attributed to an altered target of policy intervention alongside a mediating role of the state in economic development. GVC-oriented industrial policies have moved away from the dichotomy of trade protection and liberalisation toward a policy focus on inter-firm linkages. Such linkages are depicted as 'windows of opportunity' for accessing the knowledge and technology necessary for firm upgrading (Pietrobelli and Staritz 2013). In addition to providing opportunities for accessing existing technical knowledge, it is suggested that the interaction with lead firms as well as noncorporate actors (such as universities) alongside GVCs promotes collaborative learning and innovation (Whittaker et al. 2010). State policies can play an important role in facilitating the flow of equipment, services and human capital in ways that promote cross-border innovations (Pietrobelli and Rabellotti 2011).

Recasting GVCs as measures of policy intervention reframes the role of primary commodities in industrialisation strategies. A focus on linkages between economic entities, often cross-cutting different sectors, highlights the existence of synergies between the commodity-producing and related manufacturing and service sectors (Morris et al. 2012). As Fernández (2014) states, "oriented by a consensual (non-conflictive) logic, these projects and programs share the dominant idea of introducing "win-win" strategies" (Fernández 2014: 15). Hence, the question is not whether countries gear their development strategies towards current comparative advantages in agricultural production or encourage structural transformation by shifting resources towards manufacturing. Instead, as GVC-oriented policy suggests, it is how resource-rich countries can harness these resources for commodity-based industrialisation. This reasoning is reflected in a large number of recent UN reports, recommending GVC interventions for "making the most of Africa's commodities" (UNECA 2013) as a catalyst for industrialisation (see also UNECA et al. 2013; UNECA 2015; UNIDO 2012). In order to profit from these synergies, Kaplinsky and Morris (2016) emphasise the need to overcome potential trade-offs between different stakeholders of an industry by creating a collective vision that combines the interests of public, private and civil society organisations. Such an agenda corresponds with Yeung's (2014) observation that GVC-oriented policy-making entails a

Shift in the state's focus away from industrial policies targeting specific 'winners', as widely practised during the 1960s–1980s period, to one that catalyses public and private interests in ways that promote new technologies, market development and, ultimately, economic development. (Yeung 2014: 92)

To reconcile private sector interests, policy makers should take on a brokering role in 'value chain coalitions', facilitating dialogues between public and private stakeholders (Morris et al. 2012).

A controversial debate has emerged on the implications of this 'value chain turn' in industrial policy. In particular, critics argue that incorporating foreign lead firms into national policy agendas has effectively foreclosed efforts to address wider structural and macroeconomic constraints faced by suppliers in downstream markets (Lauridsen 2017). Reflecting highly optimistic expectations for the impact of market participation on economic development, GVC interventions arguably neglect political-economic factors that account for global economic disparities (Dalle et al. 2013). This is in line with Cramer (1999) who claims that GVC scholars' preoccupation with inter-firm linkages fails to address country specific features such as infrastructure related to education, transport and finance, which remain crucial for upgrading primary commodities. In a similar vein, Fernández points out that the weakness of the GVC approach in industrial policy lies in the "absence of national dynamics and trajectories, and the negligence of the role of financialization and the unequal access of actors from developing countries to financial capital" (Fernández 2014: 17).

These concerns raise important questions about the relationship of global and local factors in enabling industrialisation in upstream markets. However, considering the growing popularity of the value chain concept among policy planners, surprisingly few studies have investigated concrete cases of GVC-oriented policy interventions and related developmental outcomes (Neilson 2014). The following case addresses this gap by analysing industrial policies in the Ivorian cashew industry. It exemplifies the state's role as facilitator of local-global linkages and as regulator of local value chain activities with the target of upgrading primary production. It therefore allows to scrutinise the synergistic assumptions of GVC-oriented policies and their

6.4 Case selection and methods

utility as a tool for industrial development.

Since 2015, the Ivory Coast has been the world's largest producer and exporter of raw cashew nuts (RCNs), claiming an estimated 21 % of the world's total production worth over US\$ 650 million (World Bank 2016). This makes cashew nuts the third most important export commodity in the Ivory Coast, contributing to the income of estimated 250,000 households (ibid.). In 2011, the Ivory Coast announced its intentions to engage more actively in strategic economic planning, laid down in the National Development Plan 2012–2015, which aims to make the Ivory Coast an emerging economy within a decade. With a designated focus on increasing local value addition in the cashew sector, the Ivorian government appointed the Cotton and Cashew Council (Conseil du Coton et de l'Anacarde – CCA) in 2013 as a new regulatory authority to increase the rate of local processing from less than 10 % to 100 % by 2020.

The empirical evidence of this study is primarily drawn from interviews with Ivorian industry stakeholders and a detailed review of secondary sources. Field research in the Ivory Coast was conducted between May and June 2015, and comprised semi-structured interviews with 16 cashew traders, 9 farmer groups and 19 cashew processors, which represented 76 % of the country's cashew factories. Three interviews with representatives of CCA provided primary information and bibliographic sources on policy strategies and implemented reforms. Further data were gathered during four meetings with executive staff of the African Cashew initiative (ACi) and one US-based NGO. Interviews aimed to illuminate three dimensions of industrial policy (Weiss 2013): (a) the overall vision of sector reforms, (b) industrial policy instruments, and (c) the process of policy-making as a dialogue of key actors. Questionnaires used during interviews with private sector stakeholders comprised questions about the impact of sector reforms on forward and backward linkages, as well as private sector involvement in the reform process. A further set of questions targeted the evaluation of reforms, so as to understand the main beneficiaries. In addition, this article benefitted from primary resources collected during

a preceding study in the Indian cashew nut sector in 2014, which provided a contrasting view of the reform process in the Ivory Coast. To situate contemporary industrial policies within a wider perspective, the following section provides a brief overview of challenges to upgrading primary commodities in the Ivorian cashew industry and summarizes traditional policy responses used to address them.

6.5 Upgrading primary commodities in the Ivorian cashew industry: Challenges and policy responses

The African cashew industry developed on a commercial scale in the second half of the 20th century, particularly along Africa's east and west coasts. Today, Africa accounts for over half of global RCN production; however, more than 90 % of this produce is exported unprocessed, primarily to factories in India and Vietnam (Rabany et al. 2015).

Transforming an RCN into an edible kernel is a labour-intensive process. To prepare the nuts for cracking, raw nuts are sun dried and then roasted or cooked to make the shell easier to cut and to reduce breakage of kernels. After the outer shell is removed, kernels are re-heated to separate the inner skin (testa), which is peeled manually or by machines. Finally, kernels are graded and packed for export.

A number of constraints negatively impact the performance of Ivorian cashew processors, including high costs related to workers' productivity and wage levels compared to their Asian competitors.¹² Whereas technological advances in India and Vietnam make it possible to replace human labour, Ivorian processors suffer from restricted access to technology, increased costs of machinery and equipment, and weak after-sales services. However, the dominant market position of Asian processors stems less from access to machinery than from technological capabilities that have been built up over decades. For this reason, many Ivorian factory owners hire Asian mechanics for technical assistance. An Ivorian RCN exporter (interview, Abidjan, 16 May 2015) who planned to invest in a large-scale processing facility explained that "the problem is that there are not enough people here who know about processing. [. . .] It is not very wise to open an automated processing plant without prebudgeting for your technical assistance team. That is going to be foreigners". Finally, Ivorian processors face obstacles to procuring raw nuts. While the scale of India's and Vietnam's cashew industries make it viable for commodity traders to supply RCN from multiple locations with different harvesting seasons, Ivorian processors are restricted to sourcing from regional

¹² It is estimated that the total processing costs in Ivory Coast amount to USD 490 per ton, against approximate costs of USD 200 in Vietnam and USD 350 in India (Cashew Week 2017).

suppliers. As the General Manager of an Ivorian cashew factory (interview, Abidjan, 19 May 2015) pointed out: "In India you can get cashew at any season [. . .] but in Africa we have to stock for one complete year within one or two months". This requires considerable amounts of working capital, which local banks are reluctant to lend as cashew processing is considered high-risk. By contrast, Asian commodity traders with access to international finance enjoy considerable purchasing power.

In the Ivory Coast, two types of Asian commodity traders can be distinguished. On the one hand, traders may be associated with an Indian or Vietnamese processor, in which case they have only seasonal activities. On the other hand, some Asian traders operate in a variety of commodity sectors, in which case they have yearround operations in Africa. In either case, the operations of Asian traders in Africa strongly depend on the financial ability to pre-finance a multi-tiered network of smaller traders which collect RCNs from farmers and deliver them to the warehouses during the harvesting season. This is why many commodity traders are registered in Asian financial hubs where they benefit from preferential access to credit. This allows them to occupy a powerful position in the 'trader-driven' RCN value chain between African producers and Asian processors. In the Ivory Coast, for example, the Singapore-based commodity trader OLAM accounts for up to 25 % of RCN purchases.

As a result, Asian traders are often blamed for the supply shortages of Ivorian processors. However, Asian cashew buyers have similarly been described as important contributors to farmers' incomes. These opposing perspectives on the role of RCN traders are reflected in the industrial policy debate, which for a long time has polarized between an emphasis on restricting RCN exports for the benefit of local processors (functional upgrading into processing) and a belief that export liberalisation results in increased productivity and higher incomes for farmers (product upgrading of RCN).¹³

To overcome restrictions on industrial upgrading and promote local processors, many African governments have introduced restrictions on RCN exports at some point in history to channel the domestic raw nuts to local factories. Among the most widely used policy tools were export taxes, quotas or an export ban. While such regulations were mainly designed to curb RCN shipments to Asian factories, they similarly targeted cross border sales to neighbouring countries, as has been the case in the Ivory Coast. In addition, many governments have started controlling the marketing of RCN, for example by operating public marketing agencies (like in Guinea-Bissau) or by supervising auctions of RCN in public warehouses (like in Tanzania).

¹³ For a discussion of different types of industrial policies in the Mozambican cashew industry see McMillan et al. (2002).

However, in many countries economic liberalisation since the 1980s has led to the dismantling of public marketing boards, the state's export monopolies, state monopolies over the banking sector, as well as the removal of export restrictions. In Mozambique, for example, the RCN export ban was abolished, and the export tax was subsequently lowered from 60 % to around 20 % (Albuquerque and Hobbs 2016). Similar developments took place in Guinea Bissau, where the RCN export tax was significantly reduced and the state monopoly on RCN trade was gradually abolished.

In line with other African countries, Ivory Coast shifted from state-led economic planning efforts to two decades of structural adjustment reforms. In the developmentalist era between the 1960s and 1980s, the central government exercised strong control over large parts of the economy, especially in marketing export crops. Targeting the "Ivorianisation" of commerce, the government expanded its mandate to keep key resources and resource flows under political control, leading to the establishment of state-owned trading companies (Boone 1993). By the end of the 1970s, Ivory Coast ran 78 parastatal companies (Crook 1988). For the cashew sector, SOVANORD (Société de Valorisation de l'Anacarde du Nord) was created to collect and market RCN. A processing factory, AICA (Anacarde Industrie), was established in 1975 to process nuts supplied by SOVANORD.

Neoliberal reforms since the 1980s have weakened many established institutional arrangements. Liberalization and privatization led to the removal of state control over processing and export of agricultural commodities, fostering the rise of private, often foreign-owned, trading companies. The cashew sector exemplifies this development. Since 1981, marketing of RCN entirely returned to private operators. Consequently, AICA closed down and became privatised in 1992.

In general, industrial policy planners in the African cashew nut sector seem to face an inevitable trade-off between benefits for primary producers and for the processing industry. Restrictions on exports reduce competition over raw material and lead to lower domestic RCN prices. In this regard, they serve as a de facto subsidy for local processors at the expense of farmers (Low and Tijaja 2013). Furthermore, export taxes earmarked to subsidise local processors have been criticised for being passed down to farm gates, eventually forcing farmers to fund the establishment of processing factories (World Bank 2016). This has been reflected in the strong resistance of cashew farmers to export bans. On the other hand, the dismantling of export restrictions on raw nuts has led to rising farm-gate prices and higher RCN exports, accompanied by a decreasing rate of local processing. However, more recent industrial policies in the Ivory Coast attempt to reconcile trade-offs between different industry stakeholder and to generate mutual benefits. This development is illustrated in the following section.

6.6 Contemporary cashew sector reforms in the Ivory Coast

Recent industrial policies in the Ivory Coast have aimed to overcome the dichotomy of trade protection and liberalisation by shifting the focus of intervention towards inter-firm linkages. The country's reengagement with strategic industrial planning in 2013 was jointly planned by the Ministry of Agriculture, the Ministry of Industry and Mines, the Ministry of Finance and the Ministry of Environment. The newly established CCA took over the operations of the two previous agencies, the Autorité pour la régulation du coton et de l'anacarde (ARECA), which was created in 2002 as the regulatory body for the cotton and cashew industries, as well as Intercajou, an inter-professional body that represented all private stakeholders in the cashew industry. CCA's Board of Directors has an equal representation of the state, including all cashew industry-related ministries and the private sector. These members, whose three-year mandate is once renewable, elect a president whose appointment is ratified by a decree of the Council of Ministers. CCA runs six regional offices that liaise between the private stakeholders and CCA's headquarter in Abidjan.

The inter-ministerial cooperation in the reform process resulted in a collective vision for the cashew industry which aims to combine the interests of all industry stakeholders. CCA's ambitious aim of increasing the rate of local processing to 100 % by 2020 is expected to have a significant impact on local value capture and employment, accompanied by quality improvements of raw material and higher incomes for farmers. A baseline study commissioned by the Ivorian Ministry of Agriculture estimates that the cashew processing industry could generate additional annual revenues of more than 170 million USD and create 80,000 jobs (Rabany and Ricau 2013). The document also points to a potential competitive advantage of Ivorian factories based on their direct access to raw material. To realise this potential, the authors stress the importance of strengthening linkages between factories and farmers, as well as linkages with technology providers.

Several presidential decrees between November 2013 and March 2014 have equipped CCA with wide-ranging competencies and, consequently, the Ivorian cashew sector has undergone profound changes. These have encompassed the regulation of the domestic value chain, as well as measures to facilitate stronger ties with foreign buyers.

Regulating domestic linkages for upgrading primary production

The Ivorian Ministry of Agriculture identifies the marketing of RCN as a key area of intervention and defines a number of regulatory measures to increase the quality and productivity of RCN as well as ensuring the fairness of income distribution along the value chain. To reach these goals, CCA established a minimum farm-gate price to guarantee that producers receive at least 60 % of the FOB value of exported cashews. However, to avoid disproportionate costs for the processing industry, the floor price is negotiated in an annual multi-stakeholder meeting involving farmers and processors. Minimum prices are monitored through the introduction of a new traceability system, which requires the identification of all operators in the cashew sector and the documentation of all transactions along the value chain. At the farmer level, RCN sales require documentation of producer and buyer details, as well as information on the price, quantity and origin of purchases (in the "Bordereau d'achat"). Larger traders (operating individually, as part of a cooperative or on behalf of a commercial company) who purchase RCN from village-based traders must document the quantity, origin and destination of RCN—as well as buyer and carrier details—in a transfer form ("Fiche de transfert"). This document authorises the transport of RCN to a local processor or an exporter. The licensing of industry stakeholders also assigns defined tasks to each operator (Figure 8): exporters are restricted to purchasing RCN from licensed traders or approved cooperatives; wholesale traders must register together with village-based traders ("pisteurs") whose operations have become geographically restricted.

Local RCN Wholesale Producer RCN exporter trader trader Must register together Mandatory Documentation in the Documentation in the humidity controls "Fiche de transfert" "Bordereau d'achat" Cooperative Societies Local Processors - RCN aggregation - RCN aggregation - Planting - RCN collection - Drying Management - Transport - Storing Shelling - Loading - Drying Peeling - RCN shipping Harvesting Post-harvest - Grading handling - Packaging - Kernel export

Figure 8: Domestic marketing of RCN

Source: the author

Improved transparency and traceability are expected to improve the overall efficiency of the value chain and to generate cost benefits for traders and processors, both domestically and overseas. An RCN trader (interview, Abidjan, 14 May 2015) summarised that these reforms have "regularized the random process [. . .] It is an attempt to give all the players in the value chain a different role to play". CCA's Director announced that mutual benefits will not only result from improved efficiencies, but also from the decreasing number of intermediaries, which will allow farm gate prices to increase while similarly reduce the purchase price of Asian buyers.

While RCN exporters became obliged to formally collaborate with local traders when purchasing RCN from farm gates, exports have been hardly restricted. CCA has set an export tax of 30 FCFA per kilo of RCN, which amounts to approximately 4 % of the FOB price.¹⁴ These funds are earmarked to be reinvested along the value chain, with specified shares reserved for the implementation of quality control services, road development, agricultural research, and extension services. 15

In addition to measures for improved transparency and formalised inter-firm exchanges, CCA has introduced various measures to improve quality of raw material. This includes the compulsory use of jute sacks and mandatory quality controls at ports, which are carried out in the presence of a service provider designated by CCA. RCN exports are refused if the moisture level exceeds 10 %.

Overall, the regulation of the domestic value chain is expected to create synergies between primary producers and RCN buyers through improved quality and value chain efficiency. These effects are expected to benefit domestic and foreign value chain actors alike. The mandatory use of export bags, for example, as well as humidity controls at ports are effectively a service provided to processors overseas, targeting improved quality of RCN exports. Quality improvements were confirmed by Indian cashew processors in the beginning of CCA's reforms. One of them stated that (interview, Kollam, 17 May 2014), "[CCA] has made an effort to ensure that the quality is improving and better practices take place, postharvesting and also drying [. . .] So this year's quality from Ivory Coast was exceptionally good". CCA expects that this will finally translate into higher farm gate prices. An executive staff member of CCA explained that improved post-harvest handling and quality controls would "protect the importer [overseas]. The target is the reputation of Ivory Coast [...] If Ivory Coast sends a good product, it is good for the final buyer, but it is good for all of us" (interview, Abidjan, 15 May 2015, translated by the author).

¹⁴ In May 2017 FOB prices for RCN ranged between 700 and 900 FCFA per kilo (ACA 2017b).

¹⁵ Local processors do not benefit directly from the export tax. However, the Ivorian government recently announced to provide processors rebates of 400 FCFA per exported kilo of processed cashew kernels.

Strengthening transnational linkages for functional upgrading

In addition to regulating the domestic marketing channel, a primary target of CCA's reform agenda has been to strengthen linkages with foreign buyers and technology providers. For this purpose, CCA engaged in a variety of cross border collaborations with industry associations, foreign ministries and multi-stakeholder platforms. ACi, ¹⁶ a development project jointly financed by the Bill and Melinda Gates foundation and the German Ministry for Economic Cooperation and Development—as well as by contributions from partner organisations like Kraft Foods, Intersnack and Olam—plays an important role in this process. The project operates in five African countries and uses a value chain approach to address challenges in the African cashew industry, from production to processing and commercialisation (Franz et al. 2014). A main target of the project is to create "stable and sustainable business relationships amongst farmer groups, processors, buyers and retailers" (ACi 2015b). While such multi-stakeholder initiatives have allowed CCA to collaborate with a large variety of public and private stakeholders, it has similarly enabled foreign actors to influence the Ivorian reform agenda.

ACi worked in close consultation with Ivorian ministries to develop CCA's agenda, particularly in bringing the private sector perspective in. This involved commentary on policy documents and the provision and translation of strategy papers from other cashew-producing countries. After its initiation in 2013, CCA became a core partner¹⁷ of ACi, making it eligible to participate in high-level decisions on the strategic orientation of the project. ACi's board meetings were instrumental in elevating CCA into the international arena, facilitating dialogue with US and EU kernel buyers and giving representatives of food companies the opportunity to comment on CCA's policy drafts. CCA's exchange with RCN buyers in ACi's board meetings also contributed significantly to moving the West African cashew sector towards further integration. In 2017, several private sector representatives pressured CCA to lift its RCN export ban on neighbouring countries and allow "the supply of RCN to processing units through official corridors linking Ivory Coast to the neighbouring countries" (ACA 2017a). Consequently, CCA's Director declared his intention to authorise over-land exports.

With the technical and financial support of ACi, CCA organised several international conferences, both in the area of agricultural research as well as technological supply. An International Colloquium for Scientific Exchange on Cashew (*Colloque International d'Echanges Scientifiques sur l'Anacarde - CIESA*) took place in 2017, with the intent of sharing

¹⁶ With the beginning of its third project phase in 2016, ACi was renamed into Competitive Cashew intitiative (ComCashew).

¹⁷ Core partners of ACi are private or public organizations which contribute US\$ 1 million in cash or in in-kind services toward the initiative's objectives.

research findings between African and Asian scholars. To foster the transfer of processing technology, CCA inaugurated a biennial International Exhibition of Cashew Processing Equipment and Technologies (Salon International des Equipments et des Technologies de Transformation de l'Anacarde - SIETTA) in Abidjan which brings Asian cashew technology providers together with Ivorian manufacturers and potential investors. During the first SIETTA in 2014, CCA signed a partnership agreement with the Technical University of Ho Chi Minh (HCMUT). This collaboration led to the construction of a Cashew Technology Centre in Yamoussoukro for providing hands-on trainings to industrialists and cashew workers and assisting private investors in factory management and equipment selection.

As a result of CCA's active search for technology partners in Asia, the Vietnamese Cashew Association (VINACAS) initially requested the government of Vietnam to prevent the export of processing technology. A Vietnamese cashew trader (interview, Abidjan, 23 May 2015) recalled the following:

Ivory Coast has tried many times to import the knowledge [. . .] They organize SIETTA to invite all the processors to come to Ivory Coast, they have created a lot of conferences, they are travelling to Vietnam. On the political side they say "we open our doors, we have a lot of RCNs. Please transfer your knowledge, your experience" [. . .] But it depends on a partnership with Vietnam. Vietnam is not willing to transfer the knowledge.

However, CCA managed to move towards a more collaborative relationship after attending a conference in Vietnam, conveying that the Ivory Coast was willing to continue the supply of RCN. In a memorandum of understanding (MoU) with VINACAS, the Ivory Coast declared it would give Vietnam priority access to its raw nut production by reserving 200,000 metric tons of its annual RCN production for exports to Vietnam. Both sides also expressed their willingness to establish a representative office in respective partner countries and, CCA has since inaugurated its presence in Ho Chi Minh City with the declared target of providing Vietnamese companies with information on reliable Ivorian RCN exporters. Such efforts are planned to be complemented by Vietnamese quality inspectors at Ivorian harbours to further strengthen the trade ties between the two countries. Consequently, VINACA's chairperson declared it would be better to change their business strategy and "keep African countries as partners instead of rivals" (Vietnamnet 2016).

Benefits for everyone?

CCA combines regulative and facilitative measures with public-private partnerships to build synergies and to align value chain stakeholders around shared interests. As the owner of a processing factory summarised (interview, Abidjan, 28 May 2015, translated by the author): "[CCA] is a multi-stakeholder organisation which protects the interests of everybody to work

for the profitability of the whole value chain". A key focus of CCA's reform agenda has been the creation and regulation of linkages between local stakeholders, foreign buyers and technology suppliers. In GVC terminology, CCA attempts to transform the governance structure of the cashew value chain in ways that facilitate product upgrading of primary production and functional upgrading into processing. The former target is based on expectations that improved quality of RCN will lead to increased farmer incomes. The latter builds on the assumption that closer export linkages will allow local firms to access equipment and knowledge from foreign buyers, which finally increases the rate of local processing.

While it is still too soon to draw conclusions about the long-term impact of these reforms, some preliminary lessons can be observed. Although RCN prices increased from between 400 and 475 FCFA per kg in the beginning of the harvest season in 2013 to around 900 FCFA in 2017, this sharp increase is unlikely to have resulted from quality improvements. The RCN value chain is driven by commodity traders who focus on volumes rather than on quality-related margins (Gibbon 2001). Accordingly, all interviewed farmers stated that RCN buyers arrived with a predefined price at farm gates and hesitated to pay quality premiums to individual producers or producer organisations. Hence, RCN producers largely remain price takers. This is in line with Bassett et al. (2018) who found a quality-price disconnect in the Ivorian cashew sector, both between farmers and buyers as well as between regional buyers and RCN exporters. However, cashew farmers have benefitted from rising RCN floor prices set by CCA, which gradually increased from 200 FCFA per kg in 2013, to 440 FCFA in 2017. Furthermore, producers profited significantly from growing competition between RCN exporters, whose numbers almost doubled from 63 in 2013 to 113 in 2017.

Regarding the rate of local processing, the Ministry of Industries and Mines reported an increase in installed processing capacity by 50 per cent between 2013 and 2015. However, there is no indication that buyer-supplier linkages have provided the basis for organisational learning or spillovers of knowledge and technology. Instead, over 80 % of interviewed processors had overcome constraints on knowledge and technology with the technical assistance of the NGO TechnoServe, which runs an office in Abidjan. This included assistance on factory management as well as import and installation of machines and training of workers. At the same time, the majority of interviewed factory owners indicated that plants were underutilised due to insufficient working capital. To facilitate access to RCN, the Ivorian cashew processors' association GIC-CI (*Groupement des industriels du Cajou en Côte d'Ivoire*) requested that CCA restricts RCN exports by installing a temporary buying window, which exclusively authorises RCN purchases by local processors in the beginning of the harvesting season. Furthermore, processors proposed the establishment of a publicly funded credit guaranty to

reduce collateral requirements and interest rates of banks. The Director of the Ivorian Cashew Processors' Association (interview, Abidjan, 28 May 2015, translated by the author) pointed out that,

The season this year was catastrophic for the processors. Everybody is aware of that. But then, what do you do against that, if you want to reach the objective to process 60 per cent by 2017 and 100 per cent by 2020? [...] It needs bankers who are more interested in financing the sector [...] The problem is, I don't know of such reforms.

Some have attributed this issue to the policy focus on foreign buyers. One factory owner (interview, Abidjan, 01 June 2015, translated by the author) expressed that the Ivorian government

Is calling on multinationals to take an interest in the transformation of cashew in Ivory Coast, but they don't even address the basics [...] There is no problem with the availability of raw material. There is no problem with manpower. The problem is finance [...] If we don't even listen to our national needs, that's the problem.

Further measures proposed by factory owners included the reduction of import duties on capital equipment and spare parts, as well as simplified procedures for land acquisition and tax refunds. Overall, the positive impact of closer ties with Asian traders and processors was expected to be low.

6.7 Concluding remarks

The African cashew industry exemplifies how resource-based industrialisation strategies have evolved from 'picking winners' towards linking value chain stakeholders. In the case of the Ivory Coast, this is manifested in an inter-ministerial body that strives to maximise common benefits along the value chain through a combination of regulative and facilitative measures. Market openness is complemented by a tight regulation of the domestic marketing system along measures that attempt to ensure fairness of income distribution. Instead of protecting the domestic market from foreign exporters, the Ivorian Cotton and Cashew Council takes an active role in strengthening linkages with foreign buyers and technology providers. Hence, the Ivorian case demonstrates how the value chain concept, with its associated focus on local-global linkages, has legitimised the inclusion of foreign lead firms as development partners into the industrial policy agenda.

Whereas facilitative measures—such as technical assistance—have expanded the processing capacity and improved the quality of primary production in Ivory Coast, this study finds little evidence that inter-firm linkages have initiated upgrading. This is not surprising, given a quality-price disconnect between producers and traders, as well as a reluctance on the part of Asian industrialists to see processing undertaken by their African suppliers. Indeed, Morris et al. (2012) consider such relations to be "win-lose linkages," with little space for generating mutual gains.

The Ivorian case highlights the critical role of states in shaping inter-firm relations along GVCs. A policy focus on value chain linkages, and its imperative for state agencies to engage with international buyers, has changed the arena of actors in which buyer-supplier bargaining takes place, allowing firms to leverage their position within GVCs collectively. In the Ivorian case, this has consolidated asymmetries, rather than resolved them. CCA's involvement in multi-stakeholder initiatives and exchange with foreign business associations arguably has undermined the agency of Ivorian processors, together with the initial target of processing all nuts domestically: Efforts of Ivorian processors to lobby for a temporary ban on RCN exports failed, whereas the VINACAS successfully secured a large share of the Ivory Coast's annual RCN production.

Overall, cashew sector reforms in the Ivory Coast can be classified as a "third way" between state-minimalist and interventionist policies. While differing considerably from the market fundamentalism associated with neoliberal economic policies, the Ivorian reform agenda maintains a focus on market access and market participation as the key to economic development. As Werner et al. (2014) point out, such a moderate form of market-led development does not rule out interventions at the firm level or inter-firm linkages, however, it prioritizes market-supporting services and tries to correct institutions that inhibit the functioning of markets (or value chain efficiencies). Accordingly, sector reforms in the Ivory Coast are largely justified with reference to market failures, such as the absence of transparency or contract enforcement. Despite of moderate minimum prices, strong price distorting effects such as export bans and subsidies have given way to the conviction that market exchanges with international buyers play a positive role in promoting local upgrading. In this regard, value chain upgrading represents the link between market functioning and development, whereas the institutional framework of the value chain is largely reduced to a "business enabling environment" (see Neilson 2014). What is lacking is a closer attention to the institutional environment of the value chain beyond the facilitative and regulatory roles of the state and the way these institutions reinforce inequalities along the value chain. This is relevant, however, as the limitations and prospects of upstream suppliers to engage in higher value activities are not just determined by their own "internal" capacities and "external" support mechanisms of their institutional environment. Rather, the ways in which economic actors engage with their institutional environment often represent the main nexus to mobilize resources and exert power along GVCs. Hence, future research should aim to understand how development prospects along value chains are negotiated through institutionalised arrangements where political and economic power intertwine.

Chapter 7: Strategic responses to food safety standards - Exit, loyalty and compromise in the Indian cashew industry

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7.1 Introduction

During the last two decades, there has been extensive discussion on whether the growing importance of food safety standards in international trade has created new opportunities or constraints on food exporters hoping to benefit from world market participation (Herzfeld et al. 2011; Jaffee and Masakure 2005; Reardon et al. 1999). Recent regulatory reforms in Northern end markets have revived the debate over the trade effects of standards and their implications for agro-food exporters in the Global South. By increasing the responsibility of food importers to ensure that their foreign suppliers adhere to hygiene and food safety rules, end market legislations have reinforced the adoption of private food standards across geographies and sectors (Humphrey 2012; Martinez et al. 2013). However, the question of whether standards act as barriers or catalysts to trade remains largely unanswered, as studies point to varying degrees of value chain exclusion and trade-enhancing effects. Hence, there remains a need to explain why standards inhibit trade in some places and not in others, and to investigate the determinants that connect standards to trade performance.

Reflected in the studies that address such concerns is a recurring explanation for the trade effects of standards: namely, exporters' own ability to meet the requirements and assessment costs posed by certification procedures (Dolan and Humphrey 2000; Otsuki et al. 2001; Kim and Reinert 2009; Maskus et al. 2005). From this perspective, the impact of standards varies primarily according to the managerial, technical and financial capacities of food businesses, which might explain why particularly small and resource poor exporters are adversely affected by the proliferation of standards. Implicit in this reasoning is the assumption that food operators seek compliance, but only some succeed to do so. Lacking from most of the literature, however, is a consideration of any strategic agency of food businesses that goes beyond efforts to comply with standards that affect them.

This study explores the strategic responses of economic actors to increasingly stringent food safety demands. It suggests that greater attention to the strategic agency of food operators can help to explain the heterogeneity of trade effects of standards beyond capacity constraints to meet compliance requirements. Such a perspective prioritises local, context-specific conditions over the universal logics of global standards in shaping firm performance. The value of this approach is well exemplified by the case of the Indian cashew industry, which came under increased scrutiny during the last decade due to tightened food safety regulations in US and EU end markets.

To achieve the above objectives, this article is organised as follows. The next section provides an overview of the drivers and rationales for the proliferation of private food standards. This is followed by a short review of the effects of standards on exporting economies and a discussion of strategic responses which food operators might pursue when facing enhanced safety standards. Section four introduces the case of the Indian cashew industry and outlines the methodological considerations for this research. The remaining parts analyse the strategic responses of Indian cashew exporters to heightened food safety demands. The last section concludes the article and reflects on the findings.

7.2 Private food safety standards and public regulations

Since the 1990s, an increasing number of private food standards has emerged in response to consumers' food safety concerns. Large retailers and food processors became the main driving forces in the dissemination of these standards, demanding the certification of their globally dispersed suppliers. Today, private standards such as GLOBALG.A.P, BRC Global Standard for Food Safety and the IFS Food Standard or FSSC 22000 serve as de facto mandatory provisions for the participation in many food sectors across the world (Henson and Reardon 2005).

Standards fulfil various functions for retailers and food manufacturers¹⁸. Some standards differentiate products from competing goods by signalling premium quality and safety attributes. This may enable food businesses to enter higher value segments that require consumer confidence and positive brand reputation (Fulponi 2006). However, the majority of retailer-driven food standards is not signalled to consumers but rather utilised in a business-tobusiness (B2B) model to manage food safety risks and avoid incidents that could harm brand reputation. In these cases, quality and food safety practices serve mainly as tools for buyers to gain control over the production practices of their suppliers (Henson and Humphrey 2010). This

¹⁸ With reference to Nadvi and Wältring (2004) standards can be defined as "external points of reference', by which a product or service's performance, its technical and physical characteristics, and/or the process and conditions under which it has been produced or delivered can be assessed" (Nadvi and Wältring 2004: 56).

risk management function of standards has become more important as retailers and food manufacturers have geographically expanded their supply chains.

More recently, state interventions have accelerated the adoption of private standards across geographies and sectors. On the one hand, many governments directly promote the adoption of private standards through training programs and promotion campaigns (Havinga 2018). This intersection of public and private food safety systems is well illustrated by the GLOBALG.A.P standard, which became embedded within the regulatory frameworks of various countries (Lockie et al. 2013). For example, the Jamaican government pursues GLOBALG.A.P. certification of all farmers who wish to export, and it has spent some \$100 million in 2015/16 for this purpose (Marx 2017). At the same time, development agencies from high-income countries, such as DFID, USAID and GIZ, have integrated private standards into their projects and offer technical or financial support for the certification of agro-food businesses in the Global South.

Apart from these explicit support measures, public legislations in Northern end markets have indirectly spurred the dissemination of private standards through the introduction of due diligence obligations for domestic food operators. Following major food safety incidents, such as the BSE crisis in 1996, many states have increased pressures on food importers to prevent foodborne diseases and related hazards along their supply chains. Whereas previous legislations only held domestic food operators responsible while products were under their own control, more recent reforms have extended importers' obligations to ensure that precautions are implemented along their supply chain, including in production sites overseas (Havinga 2015). Most notably, food safety legislations in the EU and the US have radically shifted from an emphasis on food inspection to efforts surrounding hazard prevention.

The EU's General Food Law, enacted in 2002, aims to reduce health risks through "risk assessment, risk management, and risk communication" (EU Parliament and Council of the EU 2002: 2), and emphasises the important role of the private sector in ensuring that food safety standards are met along the value chain. For this purpose, food businesses must develop safety plans which determine possible risks along their supply chains, as well as responses to reduce them and possible interventions in cases of foodborne incidents. In a similar vein, the Food Safety Modernization Act (FSMA), introduced in the US in 2011, incorporates "prevention, intervention and response" as key components of food safety. The Act requires all agro-food facilities that process for US markets, whether domestic or foreign, to register with the Food and Drug Administration (FDA) and implement food safety plans, comprising an analysis of possible hazards, measures for preventive controls, and the establishment of corrective actions (FDA 2016). The FDA has also obtained the mandate to carry out inspections of food facilities, both in the US and overseas, and to accredit third party auditors to certify whether foreign food facilities comply with US legislations.

Many scholars argue that European and US food safety legislations replicate and rely on private food safety systems, thereby extending the proliferation of private standards across sectors and geographies (Graffham 2006; Humphrey 2012; Marsden 2010; Oldfield 2015; Unnevehr 2008). Whereas EU and US food regulations do not legally apply to third countries, they oblige domestic importers to tighten supplier controls in order to ensure that imported food has an equivalent level of food safety as produced by local businesses. As specified by the FDA, "importers have an explicit responsibility to verify that their foreign suppliers have adequate preventive controls in place to ensure that the food they produce is safe" (FDA 2011). Demanding certification against private food safety standards from suppliers represents a costefficient way for importers to comply with legal obligations for preventive controls and to avoid penalties which might apply if supplier verification is not carried out.

Expectations that regulatory reforms in end markets will further promote the proliferation of private food standards has revived the debate over the trade effects of standards and their implications for agro-food exporters in the Global South. The following section briefly outlines the main arguments and assumptions of this discussion.

7.3 Trade effects of standards on agro-food exporters

Food standards impact the internal organisation of food businesses and the relationships between them. The former effect stems from requirements related to management and production practices, which often demand investments in managerial, technical and human capacities. The latter arises when the dissemination of food safety standards coincides with increased vertical coordination between buyers and suppliers (Schuster and Maertens 2013). This is because buyers themselves are often involved in controlling and enforcing hygiene, health or phytosanitary standards and monitoring standards compliance in their supply base (Minten et al. 2009).

The wider implications of these effects for food exporters are far from being clear. On the one hand, the costs of adopting enhanced managerial and technical procedures as well as certification fees may be substantial for the success of food businesses (Maskus et al. 2005). Therefore, smaller agro-food businesses in poorer economies in particular are expected to be adversely affected by the proliferation of standards (Dolan and Humphrey 2000; Honda et al. 2015; Humphrey 2012; Kim and Reinert 2009; Otsuki et al. 2001; Reardon et al. 1999). As Henson and Jaffee (2008) point out, "concerns are greatest in the case of low-income countries, given their typically weaker food safety and quality management capacities that can thwart efforts towards export-led agricultural diversification and rural development." For example, Anders and Caswell (2009) show that the hazard analysis and critical control points (HACCP) standard has decreased exports from developing countries while stimulating exports from advanced economies. This effect might be reinforced as buyers seek to minimise costs for monitoring standards compliance through supplier consolidation (Swinnen 2005).

In contrast, it has similarly been argued that private standards stimulate exports from suppliers in developing countries (e.g. Maskus et al. 2005; Henson et al. 2011). By enabling food businesses to prove the adoption of superior production practices, certification can promote access to high value markets with superior food safety requirements. Quality premiums received in these markets may significantly offset the costs of compliance. At the same time, standards may reduce transaction costs and lower information asymmetries along the value chain. By doing so, they represent a bridge between consumer preferences in high-income markets and producers in the Global South, which may induce the upgrading of production practices (Swinnen et al. 2015).

Which of these effects prevail has not been answered conclusively, as empirical studies point to varying degrees of value chain exclusion and trade-enhancing effects for Southern suppliers, even across similar countries and sectors. A common explanation for this refers to the varying managerial, technical and financial capacities of food businesses to understand why standards inhibit trade in some places and not in others. From this point of view, food exporters are primarily 'standard-takers' who strive for compliance. As Henson and Jaffee (2008: 553) point out, "the predominant dialogue on food safety standards, especially relating to developing countries, presents a single strategic option of complying with (public and private) food safety standards." However, this line of argumentation has largely ruled out any strategic agency of food businesses in exporting economies. Hence, the next section attempts to differentiate this picture by introducing various responses of economic actors to food safety demands, beyond passive compliance.

7.4 Beyond capacity constraints: The strategic responses of food businesses to standards

An alternative view on the trade effects of standards acknowledges that policy makers and private sector exporters face a variety of strategic choices in reacting to demands posed by standards. Henson and Jaffee (2008) were among the first to show that the varying effects of standards such as 'trade barriers' or 'trade catalysts' depends on a number of strategic options which food operators may pursue notwithstanding their resource restrictions. These strategies include 'loyalty', 'exit' and 'voice'. 'Loyalty' as a strategic response refers to adaptation to external demands by applying new production processes or restructuring the value chain in order to comply with standards' requirements. An 'exit' strategy implies that operators refuse to comply with standards and switch to alternative products, end markets or customers. Alternatively, food operators may choose a strategy of 'voice' to change the requirements imposed on them by negotiating with standard-setting authorities or raising complaints. All three strategies may be adopted at the time a standard is implemented (reactively) or ahead of time by anticipating future developments (proactively).

This study suggests a fourth strategy, 'compromise,' which is relevant for understanding the trade effects of standards. The strategy of compromise as an organisation's response to institutional pressures has been elaborated on by Oliver (1991), who defines it as partial compliance with external requirements while simultaneously promoting one's own interests. Hence, this strategy attempts to balance external demands and internal interests, which may be achieved by conforming to a minimum level while resisting to fully adapt. Alternatively, actors may also actively engage with external stakeholders to achieve some concessions regarding the need to comply. In any case, compromise strategies tend to combine conformance and resistance in order to pacify the source of external demands posed on the organisation. In this sense, compromise tactics represent a middle course between 'loyalty' and 'exit'.

Oliver (1991) predicts that actors tend to employ compromise strategies when there is only moderate consistency between external pressures and the internal organisation or objectives of an organisation. In contrast, if external demands and internal expectations are compatible, organisations become more likely to adopt a 'loyalty' strategy. In the case that consistency between the two is low, actors might defy demands entirely. Oliver expects that compromise strategies are more likely to occur in environments where uncertainty is high, and organisations are highly interconnected with other entities.

The strategy of compromise has been examined in various contexts to explain how actors respond to expectations from external stakeholders. Examples comprise the evolution of health agencies facing conflicting demands from the state and professions (Provan et al. 2004) or the adoption of accounting principles by US state governments in response to pressures by the federal government, professional associations and the credit market (Carpenter and Feroz 2001). This case study suggests that an exploration of compromise tactics in the agro-food industry offers important insights into the trade effects of standards.

7.5 Case Selection and Methodology

The cashew industry is an instructive case for studying the impact of tightened food safety regulations on exporting economies. Cashew nuts are a low risk food item with little asset specificity along the value chain.¹⁹ This is why value chain coordination and supplier monitoring have traditionally been of secondary interest to food importers in Northern end markets. Accordingly, the adoption of food standards by cashew exporters has neither represented a competitive advantage to cashew exporters nor been rewarded with higher prices (Tander and Tilburg 2007).

However, the degree to which cashew buyers monitor production practices in their supply base largely depends on the type of buyer, which can be distinguished into two groups: commodity traders, who buy cashew kernels and ship them to so-called 'end users'; and the end users themselves, who are responsible for the final processing steps (such as salting and consumer packing).

Commodity traders fulfil various functions for the end user, including the collection of nuts, the pre-financing of shipments and the storing of kernels. However, most importantly, traders represent a buffer against market volatility, which is a notorious reason for delivery failures between cashew buyers and their suppliers. Therefore, traders have also been labelled as "shock absorbers" who can reduce trade-related risks between Indian processors and Northern end users.

The second group of cashew buyers mainly consists of end users who buy from processors directly and bypass the trader-driven import channel. These buyers are particularly found in high-end market segments that cater to quality-conscious consumers. In order to protect their brand name and secure their market position through consistent quality, these end users require more detailed information about the origin of imported cashews and the conditions under which they have been processed. However, the large majority of Indian cashew kernels enters Northern end markets through traders who have the reputation of focusing on volumes rather than on quality-related margins. As an Indian cashew processor explained (interview, Kollam, 17 November 2017):

End users would require that I go through some kind of procedures including factory plant visits, approvals and I would have to submit a lot of documentations to them, saying that these are the processes we follow. Then only would they actually buy from you. So you

¹⁹ Asset specificity describes whether exchange relationships require particular investments, such as investments in physical facilities, the need to locate facilities at a specific place or the need to deliver a good at a specific time. Many studies assume that closer value chain coordination correlates with the degree of asset specificity (Martinez 2002).

have buyers like that. But the main proportion is being shipped out to traders; people who buy and then supply the end users.

The subordinate role of food standards for most traders has meant that many cashew exporters could rely on a network of small-scale cashew processors, often operating informally or home-based, beyond the control of any monitoring body. The widespread use of these sub-contractors allows cashew exporters to reduce costs and to handle large orders in short lead times. In addition, many cashew processors increase their flexibility through horizontal inter-firm purchases from other processors. Particularly in cases of large orders, it has become customary among South Indian cashew exporters to purchase nuts from their competitors and label them under their own name.

In view of these industry characteristics, tightened food safety standards are likely to either have a significant impact on the organisation of processing activities (in case processors opt for compliance) or on end market destinations of Indian cashews (if processors reject the adoption and look for alternative end markets). The barriers for Indian cashew processors to opt for the latter strategy are particularly low, as India itself represents the world's largest consumer market of cashew kernels, characterised by lower food safety requirements than Northern export markets (interview, Kochin, 29 November 2017). At the same time, domestic cashew prices are comparable or even slightly higher than export prices, which makes a shift from foreign buyers to local consumers even more likely.

In order to investigate the effects of tightened food standards, this study builds on 43 guideline interviews with executive staff and factory managers of cashew exporters in Southern India. Interviews were conducted during two periods of fieldwork, the first between April and August 2014 and a second between November and December 2017. Interviews with private sector representatives were complemented and verified during three meetings with the Cashew Export Promotion Council of India (CEPCI).

Interview guidelines were designed to elicit information on the importance of food standards and end market regulations for upstream suppliers. This information was analysed to understand the impact of tightened food safety regulations and standards on buyer-supplier relations, as well as their implications for value chain participation, product quality and end market destinations of Indian cashew nuts.

7.6 The evolution of food safety demands in the Indian cashew industry

Cashew nuts are considered a low risk food item, but physical, biological and chemical hazards pose threats to the export performance of food businesses. Live infestation of cashew kernels

with insects and foreign matter such as hair or stones represents the most common issue. Biological contamination often stems from bacteria like salmonella, streptococcus or staphylococcus as well as fungal infestation. These problems have been present for decades but can largely be controlled at the final inspection in packing centres before shipping.

Northern buyers first started monitoring their Indian suppliers more rigidly after aerial spraying of the pesticide Endosulfan on cashew plantations had caused disabilities among the local population in Northern Kerala. Until an Indian court stopped the use of Endosulfan in 2001, the Plantation Corporation of Kerala, owned by the Kerala Government, had used the pesticide extensively to control infestation with tea mosquito bugs in its 4,696 hectares of cashew plantations (Dileep Kumar and Jayakumar 2019). One cashew processor remembered (interview, Kollam, 16 November 2017):

Suddenly people started noticing that there is a chemical contamination. And the first time that major problems happened was in the 1990s. That was also the time when the ISO certification was becoming popular. The buyers started suggesting, I would not say insisting, suggesting that sellers here do that. [Until that time] the buyers were not coming, the quality auditors were not coming, and the check was just customary. But in the 1990s something else happened.

Subsequently the number of customary buyer audits and demands for preventive measures against the risks of contamination increased significantly. Regulatory reforms in Northern end markets further amplified the scrutiny of food safety practices by buyers. In particular, the US Food Safety and Modernisation Act (FSMA) has meant that cashew processors who export to US buyers were increasingly asked to register their facilities with the FDA and implement food safety management systems to be verified by a third party. FSMA also meant that trading and sub-contracting of Indian processors to other factories, which are unapproved by US buyers, represented a violation of end market legislation. Hence, Indian processors that cater to the US need to carry out the entire processing in-house. Pressures to comply with these requirements further increased after the FDA opened a representative office in New Delhi and started factory inspections of food processors on a random basis. A processor recalled that:

It was in 2010 or 2011 when they started doing this [...] They actually don't have the right to demand an inspection in a foreign country [...] what they say is that "if you don't allow an inspection then your product can be subject to additional quality checks, additional testing and it may be denied entry into the US". So everybody who is doing business with the US has to agree (interview, Kollam, 22 November 2017).

In light of these considerations, many Indian cashew processors started to invest in equipment and management capacities. A number of technologies and practices help to control the risks of biological, physical and chemical hazards, including metal detectors, foreign matter segregators, and test procedures for chemical residues and micro-biological contamination. While most technologies and testing procedures control for hazards at the final processing stage, the implementation of a food safety management system aims to prevent any hazards before

Right now they want more and more certifications, they want more and more documentation letters about how you do the processing, what are the safety standards that you follow, what are the good hygienic practices that you follow, what are the good manufacturing practices that you follow, what are the security standards that you maintain in your factories, all those things, pages and pages. Especially US importers because they have to meet the FSMA (interview, Kollam, 21 November 2017).

kernels reach the packing centre. Such management systems are laid down in the rules of most

private food standards, which is why many buyers have started to demand certification

documents in order to limit their own liability.

In order to comply with buyers' demands, the Cashew Export Promotion Council of India (CEPCI) started to support the adoption of private food safety standards. In 2012, the CEPCI initiated a "Quality upgradation and Food Safety Certifications" support scheme to promote the adoption of standards, such as ISO and HACCP certification, in existing cashew processing plants. Apart from offering trainings on quality certification, CEPCI covers up to a third of the costs stemming from food safety certification, including consultancies, audits or equipment required for quality control. Quality-conscious processors have played an important role in pushing for these measures to move the sector towards a level playing field and also to stand up to increasing competition from Vietnam. Between 2012 and 2017, a total of 216 processing units have benefitted from the publicly subsidised automation and quality upgradation scheme (interview, Kollam, 28 November, 2017). Hence, while regulatory reforms in end markets have increased demands for food safety management systems and certification, such as ISO 22000, HACCP, FSSC 22000 or BRC, local organisations have been actively involved in amplifying buyer demands and in arranging programmes for compliance.

Despite all efforts for safer practices on the factory floor, quality demands of Northern buyers have been described as highly inconsistent. Cashew exporters widely agreed that a limited number of Northern buyers showed real interest in food safety conditions, beyond receiving verification documents issued by third party auditors. These quality-focused buyers—mostly end users—would valuate direct and long-term business relations with their Indian suppliers and frequently make factory visits in addition to demanding third party certification. However, the large majority of Indian cashews is sold to trading companies who require verification documents as protection against liability claims, but these buyers are said to show little interest in the actual practices of their suppliers. Several processors reported that it was common practice among these trading companies to purchase only a limited amount of nuts from certified sources while continuing to source from unregistered suppliers, either directly or

through other registered companies. One interviewee who claimed to be the first Indian processor to obtain 22000 certification explained (interview, Kollam, 14 November, 2017):

We have buyers who buy only one container per year just to show that they are buying from reputed people. And they make us send them a list of all documents, the certification copies, the audit copies, and non-compliance issues that were raised and the corrections we have done. And they want to know our allergen program, they want to know about the glass policy, everything they let us send around. 15 to 20 supporting documents for the pest control program, everything. But then they buy only one or two containers.

Hence, while requirements related to the registration of facilities, safety plans and certification have increased, most buyers are primarily concerned with obtaining verification documents while giving only secondary consideration to actual processing practices at the factory floor. As the owner of a highly certified processing plant complained: "All the US buyers are asking for documentation. But they are not coming here for auditing. They just want all the documents to be done" (interview, Kollam, 21 November, 2017). Accordingly, processors blamed the FSMA to be primarily a "paper tiger" which had increased bureaucratic procedures instead of leading to real change in processing practices.

7.7 Local implications of global standards: The strategic agency of Indian processors

The fact that many cashew buyers require verification documents while showing only secondary interest in food safety conditions on the factory floor has meant that food-safetyrelated investments by processors rarely translate into better sales prices. Processors reported that the technical and managerial skills required for certification posed only minor challenges for them; however, certification-related fees and additional costs were seen as a major burden. In some cases, combined costs for certification added up to 5000 Euros, in addition to trainings for employees. As certification against HACCP and ISO standards has become a de facto minimum requirement for processors who export to the US, the financial burden of certification was solely put on the processors. As one of them mentioned: "In cashews it is hard for us to get a return on that investment, but we have to do it" (interview, Kollam, 20 November, 2017).

Notwithstanding these investments, most Indian processors stated that downward pressures on prices had intensified over the last years, also due to increasing competition from Vietnam. As a result, many processors started to look for ways to offset certification costs. In doing so, three strategies could be identified: superficial compliance, strengthening direct links with end users, or turning towards the domestic market.

The first strategy means that processors obtain certification against food safety standards (at least for parts of their processing facilities) while continuing sub-contracting to unregistered and home-based processors. Such compromise strategies can pacify buyers' demands for verification documents while keeping processing costs low. These practices were described as common and widely accepted.

What is happening is that most of the people are taking the certification but they are not following the systems. They get the certificate but then they don't follow the rules, regulations and the requirements to maintain the quality as per the ISO 22000 system or as per the BRC. For them the certificate is just a piece of paper. (interview, Kollam, 14 November, 2017).

Quality-conscious processors who follow a rigid adoption of food safety provisions stated that the "pretended compliance" of their competitors would increasingly undermine their own business model. However, the root cause of this unequal competition was seen in the purchasing practices of Northern buyers, who were said to willingly ignore these fraudulent practices. In particular, quality conscious processors complained about contradictory demands of cashew buyers, who would require third party auditing while compromising on food safety for lower prices. As a processor mentioned: "[Buyers] know what is happening but they close their eyes. Because, especially in America, they want to have the cheapest price" (interview, Kollam, 20 November, 2017).

A second way for processors to remain competitive, despite the financial burden of compliance, was by catering solely to high-end clients. In some cases, this required a redirection of end markets. In particular, end users from Japan have a reputation for placing greater emphasis on the actual processing practices of their suppliers and paying a premium for superior quality. The same holds true for a limited number of European high-end buyers who engage directly with Indian suppliers instead of purchasing from international commodity traders. This was summarised by a processor whose family has been engaged in cashew processing for generations (interview, Kollam, 21 November, 2017):

We sell to Japan and we also select our buyers in the EU, the buyers who are actually end users, where there is no importer in between. We supply directly to them. They import the cargo themselves. They use the material to produce their food products which they put on the supermarket shelves. So they don't want headaches. We try to select those kind of buyers who are serious buyers [...] Most of the Indian top shippers do that.

A third option was to redirect sales of cashew nuts towards the domestic market. However, even though lower food safety requirements and comparable sales prices have attracted a growing number of cashew processors to turn away from international buyers, the shift towards local customers has been described as difficult. A main reason is that domestic demand is increasingly saturated due to the large number of Indian processors. At the same time, prior adoption of international standards and the development of global trade relations had led to path dependencies, where a refocus of distribution channels would lead to loss of returns on past investment. Hence, many cashew exporters only gradually started supplying domestic customers while continuing to cater to international markets.

7.8 The impact of food safety demands: Inter-firm relationships and product quality

Indian processors' response to the increasing proliferation of food safety standards has led to unintended consequences for India's cashew industry. Firstly, the increasing role of food safety standards has reinforced existing differences between quality-focused processors who play by the rules and price-focused ones who do not. For the former, assumptions about the relationship between food safety concerns and inter-firm relations have largely held true, as ties with highend buyers in Northern end markets tended to be direct and long-term, involving feedbackloops about product parameters. In these relationships, direct links to end users were not only seen as financially rewarding but were also considered as an opportunity to improve product quality collaboratively. A quality-focused processor explained the benefits of his business links to European end users:

We grew together [...] When you work with an end user you can correct a lot of small mistakes which we cannot usually see. In contrast, if the customer will send [the cashew nuts] to a trader, and the trader will supply it to the end user later on, then we don't get complaints. [...] So if you are working directly with the end user, you get to know what is happening and what is the quality (interview, Kollam, 18 November, 2017).

However, the vast majority of Indian cashew exports is still channelled through commodity traders with a primary focus on quantity and low prices. In fact, the market shares of trading companies that didn't have a direct stake in processing was reported to have increased significantly during recent years. Some processors even stated that the market power of these traders would have grown to an extent which allowed them to manipulate the market and put extensive downward pressure on prices. This development was often mentioned as a reason for the continuation of subcontracting to unregistered and home-based factories, despite an increasing importance of food safety standards:

When the costs are becoming too much, then [the processors] give it to the cottage industry. They will receive the raw nuts, process and give them back. That is increasing. Many of the bigger processors do this because there is no other way for them to survive. Because the production costs are too high. Suppose I am the processor, I give it to 10-15 people, they process and give it back, they don't pay proper wages, they don't pay taxes. They give it to me and I pack it and ship it out (interview, Kollam, 18 November, 2017).

Beyond fostering the sub-contracting to informal businesses through pricing pressure, traders were similarly blamed for engaging directly with the informal sector by supplying them in-shell raw nuts and taking back the processed kernels for exports. Such practices were also facilitated by lax controls of food safety authorities, whose audits were largely restricted to the packing centres of cashew exporters. A processor explained that even government auditors would not be interested in what happens prior to the packing centre (interview, Kollam, 17 November, 2017):

The facility that is registered with the FDA is only the packing centre. So what I say in my documents is that [the cashew nuts] have been packed and shipped out from this particular facility. I mean I don't have to say all this, I just need to stamp on the document the name of the facility and the registration number. And they assume that it is being packed in a facility which is vetted for all those things. But I have seven other units that supply to that packing centre and none of those is registered with the FDA.

As a result, tightened food safety demands have not led to conformity among cashew businesses and their production practices but reinforced diversity between a small group of qualityconscious processors and a large number of price-focused processors catering primarily to international commodity traders. In the former case, inter-firm relations are characterised by long term relationships with Northern end-users who conduct factory audits on a regular basis. In the latter case, inter-firm relations tend to be primarily short-term and market-based.

The fact that subcontracting and inter-firm sales between Indian processors have continued largely unchecked has also meant that smaller, uncertified processors continue to feed their products into the supply chains of Northern buyers. Accordingly, the size and operation of the informal cashew processing industry in Southern India has not declined due to increasing food safety demands during the last decade, but it remained an important source of flexibility and cheap labour for formal cashew businesses. This has been confirmed by the owner of a medium-sized processing company who mentioned that "smaller processors are still able to sell to US markets because they would sell to a bigger processor who combines it with his shipment. [...] There is no change, and this is never going to change" (interview, Kollam, 15 November, 2017).

7.9 Conclusion

The case of the Indian cashew industry illustrates how food safety regulations in Northern end markets have stimulated the proliferation of private standards. By putting agro-food importers under increased scrutiny to monitor their own global supply chains, cashew importers increasingly demand verification of safety systems from their suppliers. As a result, the proliferation of private standards has extended to low risk industries and places pressures on food businesses which previously faced few concerns regarding their production practices.

The impact of these developments on the Indian cashew industry has been mixed, with unintended consequences for businesses that played by the rules. Whereas many processors invested in superior technology and certification, not least because of support from local institutions, such efforts rarely translated into premium margins. Instead, quality-related investments were widely perceived as a competitive disadvantage given that most buyers continued to focus primarily on quantities and low prices. At the same time, common assumptions that particularly smaller, informal businesses would face detrimental effects by standards were largely dismissed, as the informal sector maintained its central position as a source of flexibility for formal businesses and continued feeding into the export channels to EU and US buyers.

In order to explain these effects, this study points to the central role of economic actors' strategic responses to food safety demand. These strategies have been very heterogeneous on the part of both buyers and suppliers. Whereas cashew buyers widely encourage their suppliers to certify against HACCP and ISO guidelines and started asking for verification documents to protect themselves from liabilities, the scrutiny of these demands varies largely between different types of buyers. While some buyers have integrated food safety concerns into their business model, reflected in direct supplier relations and factory audits, the majority of buyers continues to show little interest in actual processing conditions on the factory floor.

In light of these considerations, Indian processors face various strategic options. While some quality conscious processors attempt to tighten direct links with end users, others have started to redirect their supply channel towards the domestic market. However, such strategies of "loyalty" and "exit" only apply to a small share of processors, whereas the vast majority has chosen to "compromise" by signalling compliance with certification guidelines while simultaneously subcontracting to informal businesses.

The absence of a uniform response from processors calls into question whether the trade effects of standards can be derived from any universal logic related to standards' requirements or the capacity constraints of suppliers. Instead, the case of the Indian cashew industry points to the importance of context-and industry-specific factors in opening or restricting the strategic options of economic actors. In the cashew industry, these options were particularly shaped by the type of end market buyer and related forms of inter-firm relations. In this regard, it is not only crucial to understand the impact of private standards on global value chains, but similarly

to study the ways in which the organisation of value chains determines the various strategic options of upstream suppliers when facing standards' demands.

Chapter 8: Conclusions

This research began with the observation that agro-food industries are subject to constant restructuring processes, which engender new divisions of labour on an increasingly global scale. This was observed in the cashew industries in India and Ivory Coast, where the restructuring of production and processing has entailed a variety of organisational and geographical shifts over the past few decades, both between and within the two countries. India and Ivory Coast are located in different positions of the cashew GVC, the former being the world's largest processor of cashew kernels and the latter being the largest exporter of unprocessed RCNs, primarily shipped to Indian factories. However, both countries share the target of expanding the market share of their local processing industry. As the cashew industry represents crucial sources of income and employment for both countries, the restructuring of its local and international division of labour has become highly politicised.

This study explored recent restructuring processes in the cashew industry by asking: How did the geography and organisation of the cashew industries in India and Ivory Coast evolve, and how can the restructuring be explained? The primary goal was not to draw abstract conclusions about industrial restructuring as an outcome of anonymous forces of globalisation, but to investigate the drivers and outcomes of these complex processes within particular places. To do so, an 'institutionally enriched GVC approach' was used to guide empirically grounded research in elucidating the implications of place-specific institutions and GVC governance on the development prospects of local industries. The remainder of this concluding chapter provides a brief overview of the findings and links them to the broader academic debate about GVCs and global industry restructuring.

8.1 The restructuring of the cashew industry

The evolution of cashew processing and trade in India and Ivory Coast was addressed in four empirical chapters, each focusing on different parts of the cashew value chain. These started with an analysis of the overall governance structure of the value chain which links Ivorian RCN producers to Indian processors and consumers in Northern end markets. The successive two chapters focused on the institutional environments in India and Ivory Coast, in an attempt to understand the underlying reasons behind the reorganisation of processing and trade over the last decades. This was followed by a chapter about the impact of food safety regulations in Northern end markets on the organisation of cashew processing in India.

Chapter 4 investigated the governance of the cashew value chain. It pointed to a bipolar structure consisting of a trader-driven segment between Ivorian farms and Indian processors and a buyer-driven segment that links processors to Northern end markets. These two subsystems reflect the divide between North-South trade of quality sensitive consumer products and South-South trade of an undifferentiated raw material. Within the latter, commodity traders occupy a dominant position, however, without exercising direct control over lower tiers of their supply channel. Instead, inter-firm linkages within Ivory Coast are primarily based on seasonal business relations characterised by frequent defaults, mutual suspicion, and deep distrust. These relationships provide few opportunities to Ivorian RCN suppliers for quality-related upgrading of RCNs, nor do they offer knowledge and technology-related spillovers for functional upgrading into processing.

Chapter 5 analysed how the functional organisation and spatial distribution of processing activities in India has developed against the background of regulatory reforms over the past few decades. It showed that the industry has evolved from geographically concentrated, large factories towards disintegrated processing activities that link cashew exporters to smaller subcontractors. At the same time, labour intensive processing steps relocated from Kerala to low wage regions in Tamil Nadu, where home-based workplaces and informal factories became integrated into export markets. As the functional and spatial disintegration of the cashew value chain has increased the number of subsidiaries, trading partners especially at lower tiers can be easily switched. Hence, the multi-tiered cashew value chain in India features different kinds of loose coordination, characterised by the absence of long-term obligations and durable commitments.

Chapter 6 investigated efforts in the Ivorian cashew industry to move from primary commodity production to exports of processed cashew kernels. In line with the state's target to increase the rate of local processing to 100 % by 2020, Ivorian processing companies have expanded their installed capacity rapidly over the last few years. In contrast to the assumed constructive role of lead firms in supplier upgrading, cashew buyers only played a subordinate role in initiating this development. Instead, various non-firm actors took an active role in setting incentives and providing access to knowledge and technology, including state agencies, universities, NGOs and multi-stakeholder initiatives.

Chapter 7 addressed how food safety reforms in Northern end markets have proliferated private standards and pressured cashew importers to engage in supplier monitoring and food safety verification. These regulations had major implications for the sourcing practices of buyers; however, the impact on Indian exporters has been mixed despite pressures for improved quality standards and supply chain transparency. Whereas many Indian processors invested in superior technology and certification, the informal sector maintained its central position and continued feeding into the export channels to EU and US buyers.

8.2 Drivers of change: Strategic responses to institutional pressures

The insertion of India and Ivory Coast within the global cashew industry has been shaped by a variety of place-specific institutions which define legitimate action and incentivise strategic decisions of economic actors. Most of these institutions came into existence by government initiative at the state and sub-state level, including labour legislations, food safety regulations, and industrial policies. Analysing restructuring processes through the lens of firms' strategic responses to institutional pressures has been instrumental in grasping the organisational complexity and spatial extent of the cashew value chain. These responses may take various forms, from passively accepting institutionalised norms to actively altering patterns of interdependence.

When facing stricter labour regulations, many Indian cashew processors chose to escape from institutional attachments in Kerala through reorganisation and relocation. These strategies of institutional avoidance soon became incorporated into common industry practice in South India. In contrast, the responses of cashew processors to tightened food safety demands were characterised by considerable diversity. Here, avoidance strategies only applied to a small share of processors which redirected their sales to the domestic market. A similarly small number of processors opted for acquiescence through quality upgrading of their entire operations. However, the vast majority of processors chose to *compromise* by conforming only to minimum standards while resisting more far-reaching demands. This was mostly done by signalling compliance with certification guidelines in their own facilities while simultaneously subcontracting to informal businesses. In Ivory Coast, cashew processors attempted to influence their institutional environment through collective action and political advocacy. Despite discontent with current industrial policies, Ivorian cashew processors were convinced that institutional support was needed to expand their capacity.

A focus on the strategic responses of firms to institutional pressures overcomes the determinism of structuralist approaches to industrial organisation, while addressing concerns that contemporary GVC analysis tends to marginalise the wider institutional context in which firms strategize. Whereas lead firms and institutional arrangements constitute a rule-governed structure for the production, processing and trade along GVCs, an appreciation of the strategic agency of firms creates space for organisational diversity and change. Out of the interplay between firm strategies and institutional pressures, it is argued, emerge the drivers and developmental prospects associated with the globalisation of local economic activities.

8.3 Revisiting GVC analysis: Governance, upgrading and institutions

The cashew industry illustrates how macro-level forms of GVC governance shape micro-level efforts of local upgrading. According to their position in the value chain, India and Ivory Coast are exposed to different demands from buyers that determine their development prospects. In the trader-driven segment between Ivorian farms and Indian processors, buyers focus primarily on volumes and are reluctant to pay quality-related margins. By doing so, they set few incentives for product upgrading of RCN, nor do they offer knowledge and technology-related spillovers for functional upgrading into processing. In contrast, the buyer-driven segment between Indian processors and Northern buyers features different options for suppliers to step into higher value activities, stemming from the quality and food safety demands of different types of buyers and end markets. This has meant that many Indian processors sought to foster direct relationships with high-end clients who pay a premium for superior quality and processing practices of their suppliers.

The GVC framework offers an empirically tractable model to reveal these different forms of governance and their impact on supplier upgrading. However, its central preoccupation with the universalising logics of private governance by lead firms provides only limited insights into the underlying reasons for the emergence and evolution of organisational diversity and the geographical distribution of GVC activities. As exemplified by the cashew GVC, these processes are rarely straightforward and foreseeable but rather emerge at the crossroads of different rationalities and valuations by economic entities. These rationalities become established against the background of-sometimes conflicting-institutional pressures in particular places, which might lead to unintended restructuring processes.

This is why I place a strong emphasis on the embeddedness of place-bound actors in different territorial structures to present GVC restructuring processes as contingent upon the engagements of economic actors with their institutional environment, processes which Neilson and Pritchard (2009) define as value chain struggles. Drawing on literature from institutional theory and resource-dependence-theory, this study refines the concept of value chain struggles by incorporating various strategies which economic agents employ in response to external constraints. Such an 'institutionally enriched GVC approach' is promising to address recurring criticism that the GVC framework, in its most widely applied form, has marginalised the institutional context in which inter-firm relations are embedded. At the same time, it offers theoretical insights into the concrete types and drivers of institutional engagements which underlie the restructuring of GVCs.

Crucially, an incorporation of the institutional context into GVC analysis is needed to explain the emergence of different forms of GVC governance and the occurrence of GVC upgrading in different places. While the case of the cashew industry confirms the crucial impact of inter-firm relations and types of end market buyers on regional development, it also demonstrates that an exclusive focus on corporate governance overestimates the power and control which lead actors exert over their suppliers. Instead, a variety of state and sub-state institutions have been equally important in determining how the cashew GVC is governed, where activities are located, and how local industries are inserted within the global industry.

8.4 Advancing the state-GVC agenda

This research contributes to the emerging debate over the roles of the state in GVCs. As outlined in chapter 2, the GVC framework was originally established with the aim of overcoming statecentric analytical approaches, which was achieved by placing primary concern on corporate governance and inter-firm relations. More recently, however, a growing number of researchers has started to investigate the state's influence on the creation and maintenance of GVCs (for example Dallas 2014; Mayer and Phillips 2017; Neilson et al. 2014; Smith 2015) and its different roles as facilitator, regulator, producer, or buyer (Horner 2017). According to Horner and Alford (2019: 555), "the state-GVC nexus is arguably one of the most crucial issues for contemporary research on GVCs".

The example of the cashew industry sheds light on the different ways that states shape GVCs. The organisational and spatial structure of the cashew GVC has been largely determined by state and sub-state institutions, with far-reaching consequences for domestic inter-firm relations and export linkages. In Ivory Coast, GVC activities became subject to licensing of GVC operator, price controls, and traceability requirements to ensure fairness of income distribution. The Ivorian Cotton and Cashew Council also took an active role in strengthening linkages with foreign buyers to access processing technology and technical assistance for functional upgrading. In India, facilitative measures of the state included technical assistance, subsidies, or preferential interest rates, whereas labour regulations in Kerala have introduced a wide range of constraints on the activities of private businesses. A historical perspective on the cashew industries in India and Ivory Coast also revealed the state's role as buyer through the establishment of state-owned trading companies responsible for the collection or import of RCN.

Apart from these different roles of the state in enabling or restricting GVC activities, state institutions may similarly become an object of firm strategies themselves. As laid out in chapter 6, state engagements may represent the main strategic lever for GVC actors to mobilise resources and exert power along GVCs. Therefore, the struggle for altering the status quo in GVCs is not just one between firms and *within* institutional constraints but is similarly carried out *through* various forms of institutional engagements, often at the state level, to negotiate or contest established rules and policy practices. This challenges the often-assumed distinction between "internal" forms of GVC governance exerted by value chain actors and their "external" institutional environment. As Neilson and Pritchard write, "institutional formations and governance arrangements coexist in an iterative nexus within global value chains" (Neilson and Pritchard 2009: 9). Additional research would be helpful to further elucidate the strategic engagements of firms with states to alter the governance of GVCs and to leverage their own position within GVCs.

Another lesson can be drawn regarding the geographical reach of state institutions. The case of the cashew GVC illustrates how state regulations are transmitted through GVCs and exert pressures on actors in distant places. This might lead to conflicting institutional pressures on suppliers, as exemplified by Indian processors who started subcontracting in response to local labour reforms while being exposed to demands for food safety verification by US buyers. In this sense, international buyers become "carriers" of regulations in their home countries which guide their sourcing practices and external relationships along GVCs. Such findings challenge the alleged 'disembedding power' of globalisation which detaches social relations from their localised contexts (Cairncross 1997; Ohmae 1994). Instead, they reaffirm that "the specificities of institutions [...] are clearly not eliminated by globalization, but brought into intensified contact, triggering a process of accelerated change that leads to increasing diversity over time" (Sturgeon et al. 2008: 298).

More research is needed to comprehend how this multi-layered embeddedness of economic actors impacts on the restructuring of GVCs. Consideration of the strategic responses of economic actors to institutional pressures can help to identify different forms of public-private engagements, to arrive at a more comprehensive understanding of how states shape the insertion of local industries within GVCs.

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