Loose coordination and relocation in a South-South value chain: cashew processing and trade in southern India and Ivory Coast

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Abstract
This article is concerned with a crucial part of the cashew nut value chain which links raw cashew nuts to processing. We focus on the interactions of intra-chain governance and its institutional context. The central question is how the raw cashew nut value chain is coordinated and relocated as a response to its changing institutional environment. Using a qualitative methodological approach, the contribution shows the dynamics of loose chain coordination and relocation in India and Ivory Coast.

Zusammenfassung
Dieser Beitrag beschäftigt sich mit einem zentralen Teil der Cashew-Wertschöpfungskette von der Rohnuss hin zu den weiteren Verarbeitungsschritten. Im Fokus steht die Steuerung innerhalb der Wertschöpfungskette im Kontext ihrer institutionellen Umwelt. Die zentrale Frage lautet, wie die Koordination der Wertschöpfungskette durch institutionelle Veränderungen beeinflusst wird und die Kette sich dabei räumlich verlagert. Mittels eines qualitativen Ansatzes zeigt dieser Beitrag die Dynamik loser Koordination und damit verbundener räumlicher Restrukturierungen innerhalb Indiens und der Elfenbeinküste auf.

Keywords Global production, governance, South-South, cashew nut, India, Ivory Coast

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 relo-
cation 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 canalisations 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.

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 heuristic 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 agrifood 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
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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.

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.

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.

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 (Cashew Handbook 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. 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 1. The figure also highlights that the chain is shaped by global competition for cheap processing and governmental policies.

4.2 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.
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during the harvesting season. Hence RCN processing is characterised by low technological needs, low entry barriers and seasonal supply patterns.

4.3 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 year-round (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.

4.4 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 exclusive-
ly 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 buy-

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**Fig. 2** Map of RCN production and processing in southern India and Ivory Coast
ers, 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 2012; 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 (Sitharaman 2014). 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.

4.5 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 (Fig. 2). 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). 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. 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.
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References


Carmody, P.R. 2013: The rise of the BRICS in Africa: the geopolitics of South-South relations. – London


Lindberg, A. 2005: Modernization and effeminization in India: Kerala cashew workers since 1930. – Copenhagen

Murphy, J.T. 2008: Economic geographies of the Global South: missed opportunities and promising intersections with development studies. – Geography Compass 2 (3): 851-873


Neilson, J. and B. Pritchard 2009: Value chain struggles: institutions and governance in the plantation districts of South India. – Oxford
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Srinivasan, M.V., N. Ateeq and M. Jayanthi 1999: Impact of cashewnut processing industry on the labour market for women in Kanyakumari District, Tamilnadu. – New Delhi

