

# **JOURNAL FÜR ENTWICKLUNGSPOLITIK**

herausgegeben vom Mattersburger Kreis für Entwicklungspolitik  
an den österreichischen Universitäten

vol. XXV 2–2009

## **GLOBAL COMMODITY CHAINS AND PRODUCTION NETWORKS**

**Understanding uneven development in the  
global economy**

Schwerpunktredaktion: Leonhard Plank  
Cornelia Staritz

mandelbaum *edition südwind*

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**STEPHANIE BARRIENTOS, KWADWO ASENSO-OKYERE**  
**Cocoa value chain: challenges facing Ghana in a changing  
global confectionary market**

**1. Introduction**

The expansion of global value chains into sectors characterised by small-scale production has important implications for agro-export strategies in many developing countries. Global value chains in agriculture are dominated by large buyers and processors with strong commercial power. They are oriented towards a more sophisticated and nuanced consumer market, which allows them to capture an increasing share of the final consumer price within the value chain. The ability of developing country governments to support farmers or negotiate better terms of trade has been curtailed by policies of economic liberalisation and structural adjustment in many developing countries. In this context, the imbalance between commercially sophisticated buyers and fragmented small-scale farmers who supply them is growing. This has potentially adverse consequences for the sustainability of higher quality agro-sourcing in some sectors. The cocoa-chocolate value chain provides one example of this trend, where there is increasing global output with declining cocoa quality and price. An exception is provided by Ghana, which has managed to buck some of these trends, putting it in a stronger position than many other cocoa producing countries.

Ghana has a reputation for producing some of the highest-quality cocoa in the world. It is the second largest exporter of cocoa after Cote d'Ivoire, and has historically earned a quality premium in the international market. Unlike other producer countries, Ghana resisted the dismantling of its cocoa marketing board in the 1980s, and the Ghana Cocoa Board (COCOBOD) continues to play a key role in the coordination of the sector. In a value chain increasingly dominated by a small number of cocoa processors and

manufacturers, COCOBOD is able to support producers, negotiate with buyers and provide a unified front in the external market. With rising supply worldwide, the cocoa sector witnessed a secular decline in price after the late 1980s, and downward pressure on quality, as production costs were reduced. Ghana is currently well placed in the middle to higher end of the cocoa market. However, production is characterised by small-scale farming, with low productivity and pressure on quality. Ghana thus faces challenges in maintaining its position. The strategy of COCOBOD needs to be informed by an understanding of the changing dynamics of the global cocoa-chocolate value chain, if it is to be successful.

This paper examines the changing dynamics of the cocoa value chain and considers its effects on the development of Ghanaian cocoa as a major export sector. It examines this by analysing the position of Ghana in the cocoa-chocolate value chain, in particular by focusing on how the maintenance of COCOBOD has helped to maintain its position as a world producer of high quality cocoa. The paper draws on findings from an independent study commissioned by Cadbury (Barrientos et al. 2008)<sup>1</sup>. The project examined the factors that make up sustainable production for cocoa farmers in Ghana, with a focus on the socio-economic dimensions of sustainability. This paper focuses on the international end of the value chain from COCOBOD to chocolate processors and manufacturers in order to assess the challenges Ghana faces. It is argued that, as a marketing board, COCOBOD helps to mediate the interests of fragmented producers, guards Ghana's position in the global market and helps to counter imbalance within the commercial power relations of the cocoa-chocolate value chain. However, rebalancing of power relations within the value chain is needed if the sustainability of the sector is to be secured.

## **2. Global value chain in chocolate and confectionery**

The cocoa-chocolate value chain has undergone rapid change over the past decade, which has affected the relationship between producers and buyers. The consumption end saw a significant process of concentration and centralisation amongst processors and manufacturers, with a more nuanced focus on differentiated consumer markets. This has facilitated the penetra-

tion of more coordinated 'value chains', with stronger linkages between retailers (especially supermarkets), chocolate manufacturers and cocoa processors (or grinders). Despite these changes, cocoa remains a traded commodity which can be purchased on both spot and forward markets. At the production end in the mid 1980s, there was a shift away from marketing boards amongst many developing country producers to a more liberalised export sector. In Africa in particular, production is characterised by small-scale farmers who are fragmented and often poorly supported in the face of volatile market conditions. This has the potential to undermine the sustainability of quality cocoa production.

Global value chain analysis (GVC) was developed initially in the manufacturing sector to examine the inter-linkages between commercial actors, from global buyers, through intermediaries, to producers. It explored how governance structures dominated by lead firms have shaped the outsourcing of production and facilitated extraction of economic rents at different nodes of the chain (Gereffi/Kaplinsky 2001). An important reason behind the ability of lead firms to extract economic rent is their oligopolistic position in relation to a relatively fragmented global supply base. The imbalance in this commercial power relationship allows dominant buyers to increase the value they extract from the chain when negotiating with weaker fragmented suppliers. They are able to exert pressure on suppliers to reduce costs and meet more exacting product and social standards (Kaplinsky 2004). The ability of suppliers to resist depends in part on their bargaining position in the value chain (Nathan/Kaplan 2007).

One strand of the literature has begun to examine GVCs in relation to small-scale agricultural producers in sectors such as coffee, flowers and horticulture (Dolan/Humphrey 2004; Gibbon/Ponte 2005; Vorley 2004). Analysis of the role of GVCs in the cocoa sector remains, with some exceptions, limited (Fold 2002, 2004; Kaplinsky 2004). This paper draws on the GVC approach in order to better understand the changing role of buyers and their targeting of an increasingly nuanced consumer market where higher values can be captured. At the same time, the highly fragmented profile of small-scale cocoa producers clearly limits the extent to which production can be coordinated and standardised by buyers. In some sectors, this has led to the exclusion of small producers (Dolan/Humphrey 2004), but where buyers

are dependent on such producers for supply, such as is the case with cocoa, this is less likely to occur.

GVC analysis emphasises the importance of value creation and value capture by firms at different nodes of the chain. How 'value' is defined is affected not just by production costs and the intrinsic physical traits of a product, but also by the social norms and perceptions of consumers who are prepared to pay more for perceived higher 'quality' (Raynolds et al. 2007). Quality in this context can include social and environmental standards and designate origin products, for which consumers are prepared to pay a higher price. Initially, this was the focus of smaller alternative trading organisations. Large buyers are, however, adapting to meeting changing consumer tastes at the higher value end of GVCs, by introducing initiatives or adopting labels that meet these trends. However, achieving and maintaining sufficient output that meets these standards requires sustaining the livelihoods of small-scale farmers involved in production in developing countries.

The global cocoa-chocolate value chain has undergone a rapid process of centralisation and integration over the past two decades. Most notable developments have been a growing concentration amongst manufacturers and processors (also called grinders), with a sharp decline in the number of specialised traders, as well as more nuanced consumer demand and segmentation of the chocolate market. Concentration on the manufacturing side of the industry is reflected by the top ten manufacturers, which accounted for 43% of world sales in 2005 (ICCO 2007b). These companies included Nestlé, Ferrero, Cadbury, Mars, Hershey and Kraft Foods. Each company sells a range of brands, targeted at different sections of the consumer market. Increasingly in Europe, their products are retailed through supermarkets, as they have come to dominate the food retail sector. A declining number of manufacturers are involved in some markets in both the processing of cocoa beans as well as the production of chocolate. However there has been a trend towards increasing outsourcing of processing to specialised processors by manufacturers (Fold 2002, 2005).

Over the past two decades, there has been a notable consolidation of the cocoa-processing industry. Four firms – Archer Daniels Midland (ADM), Cargill, Barry Callebaut, and Blommer – accounted for 42% of the market in 2003/4. Processors in particular have increased their upstream integration in many cocoa-producing countries. Processing is geographically concen-

trated, with the Netherlands, US and Cote d'Ivoire accounting for 50% of total global capacity (Kaplinsky 2004; Fold 2002, 2004, 2005). The trend towards concentration was facilitated by liberalisation under structural adjustment in the 1980s, which led to the decline of state marketing boards in Anglophone countries and stabilisation funds in Francophone countries. These boards were public entities that facilitated marketing by purchasing cocoa from smallholder farmers in the producing areas and selling the cocoa abroad. Many of the boards operated stabilisation funds so that producers would be insulated from price fluctuations in the world market. The producers were offered a guaranteed price which operated during the season. In some cases marketing boards undertook the construction and rehabilitation of rural roads to facilitate the movement of cocoa, as well as provided subsidised inputs and services for the farmers.

The number of specialised cocoa traders, who used to maintain cocoa beans and products as a traded commodity on both the forward and spot markets, has declined, with some traders having expanded into processing themselves (predominantly ADM, Cargill and later Armajaro). Cocoa was largely traded on the futures market, where agents participated on behalf of producing countries and grinders. Here agents hedge by buying and selling contracts without actually taking possession of cocoa; they may thus reduce volatility in the market. As more cocoa became available on the world market, some producers and purchasers by-passed the futures market and bought cocoa for immediate delivery on the stock market. Another reason for increasing spot purchases is consolidation in the cocoa-processing industry, combined with developments in chain logistics (bulk transportation, information and communications technology) and liberalisation within producer countries, all of which have allowed companies to reduce the amount of cocoa stock they hold. Whereas spot market prices reflected current demand and supply conditions, futures market prices are based on expectations (forecasts) in the market and therefore the two prices could be different as supply factors (weather, new cocoa harvestings, geopolitics) change. If expectations are correctly predicted futures markets could prevent market 'bubbles' (extreme price situations), which spot markets may not be able to do.

Processors thus play a prominent role in the link between manufacturing and production. The contemporary cocoa-chocolate chain has been

described as featuring ‘bi-polar governance’. One pole is composed of the concentrated group of processors, who increasingly have operations in both producing and consuming countries. The second pole is composed of the large chocolate manufactures, although their operations along the chain are much more limited (Kaplinsky 2004; Fold 2002). The cocoa sector demonstrates different characteristics from many consumer goods normally analysed using value chain analysis. Firstly, cocoa is a traded commodity with price determined by demand and supply on forward/spot markets. However, global demand is generated by an increasingly concentrated number of processors and manufacturers who are in a strong commercial position to buy at favourable prices. Supply has become more competitive through liberalisation in producer countries, and more countries have moved into the sector. With increasing supply, this market context has worked to depress prices. Secondly, processors and manufacturers operating at the consumer end of the market have been better positioned to understand and adapt to changing consumer requirements than small-scale producers, and hence have developed strategies to expand higher value activities.

To remain competitive globally, companies are constantly striving for product innovation and novelty to differentiate themselves and their products. They are also compelled to respond to a market that is changing, and becoming increasingly differentiated. It is possible to identify three market segments: firstly, we have the high-quality ‘niche’ segment, where some consumers are becoming more health-conscious, and have greater access to information, through the internet and long-haul travel, about the origins of the food they buy. The ‘niche’ end of the chocolate market is expanding at a faster rate than the average growth of consumption. For example, ‘fine or flavour’ grades with a known origin were estimated to have grown by a third from 60,000 tonnes in 2000/1 to 80,000 tonnes in 2004/5. This figure is much higher when organic and Fairtrade chocolates are included (estimated 30,000 tonnes; Barrientos et al. 2008). Secondly, there is the mainstream-quality segment, where there is a growing consumer demand that brands should provide broader assurance of product quality that also satisfies health, environmental and social concerns. Thirdly, there is the bulk low-value segment, where there has been a growing volume of demand for cheaper lower-quality chocolate, not only in developed country markets,

but also particularly in some developing countries such as China, India and Brazil.

The changing dynamics of the cocoa-chocolate value chain is reflected in the share of total value going to the different commercial actors in the chain. Value chains reflect a shift in market focus from a producer to a consumer orientation. Larger processors and manufacturers have been able to capture a rising share of final value through attention to consumer demand and market positioning. The World Bank (2008) estimates that developing countries' claims on value added in the cocoa sector declined from around 60% in 1970-2 to around 28% in 1998-2000. Disaggregating the value chain further, estimates indicate that cocoa farmers' share of the cost of a typical UK bar of milk chocolate in 2004 was approximately 4% (Gilbert 2007; Lass 2004). Gilbert (2007) estimated that the processor and manufacturer costs and profit accounted for 43%, the retail costs and margin 24%, with other costs and tax accounting for the difference. Lass (2004) estimates the manufacturing, packaging and distribution share at 35% and the retail costs and margin at 32%. The relative share differential partly relates to costs, but it has been argued that there is an increasing imbalance within the chain between manufacturers/processors and cocoa farmers (Oxfam 2002; Vorley 2004). Any imbalance is partly a result of divergent trends at the buying and producing ends of the chain. Whilst concentration enhanced the oligopoly position of processors and manufacturers, producers faced increasing fragmentation and liberalisation. This raises the issue of whether sustainability for producers is feasible without the rebalancing of power relations within the value chain, and if so, how that could take place given the increasingly dominant position of large processors and manufacturers. In the following section, we examine the role COCOBOD has played in the cocoa sector in Ghana.

### **3. Ghana cocoa value chain<sup>2</sup>**

To some extent Ghana has managed to steer a better path through the changes in the global cocoa-chocolate value chain than many producer countries. It resisted pressure from the World Bank and the International Monetary Fund in the 1980/90s to dismantle its marketing board. While

it engaged in a process of partial reform, it maintained COCOBOD, which continues to play a key export role today (Shepherd/Onumah 1997). From the perspective of GVC analysis as applied to a traded agricultural commodity, this has put Ghana in a fairly unique position. An important reason behind the ability of lead firms to extract economic rent is their oligopolistic position in relation to a relatively fragmented global supply base. The imbalance in this commercial power relationship allows dominant buyers and retailers to increase the value they extract when negotiating with weaker fragmented suppliers. The continuation of COCOBOD has put Ghana, as a producer country with a small-scale farming base, in a unique position to be able to facilitate the coordination of its position on world markets and negotiate with large chocolate processors and manufacturers.

Ghana is the second largest producer of cocoa in the world, exporting 17% of world exports in 2004/5 (ICCO 2007a). Cocoa is the second largest export commodity of Ghana after gold, accounting for 32.2% of export earnings and 9.5% of GDP in 2006. In cases where inputs in cocoa production are locally sourced, and because of the labour intensity of cocoa production, its importance to the economy is probably much greater than these figures suggest. In contrast to the process of consolidation and integration amongst cocoa processors and chocolate manufacturers, cocoa producers remain characterised by small scale farming in many countries, particularly West Africa. In Ghana, the average holding per farmer is about two hectares. Although migrant and locally hired labour is involved in cocoa farming, historically, cocoa farm operations have been carried out by the farmer and his/her family. However, with reductions in family size and unavailability of children for farm work due to schooling, the use of casual labour has been the norm in current cocoa production.

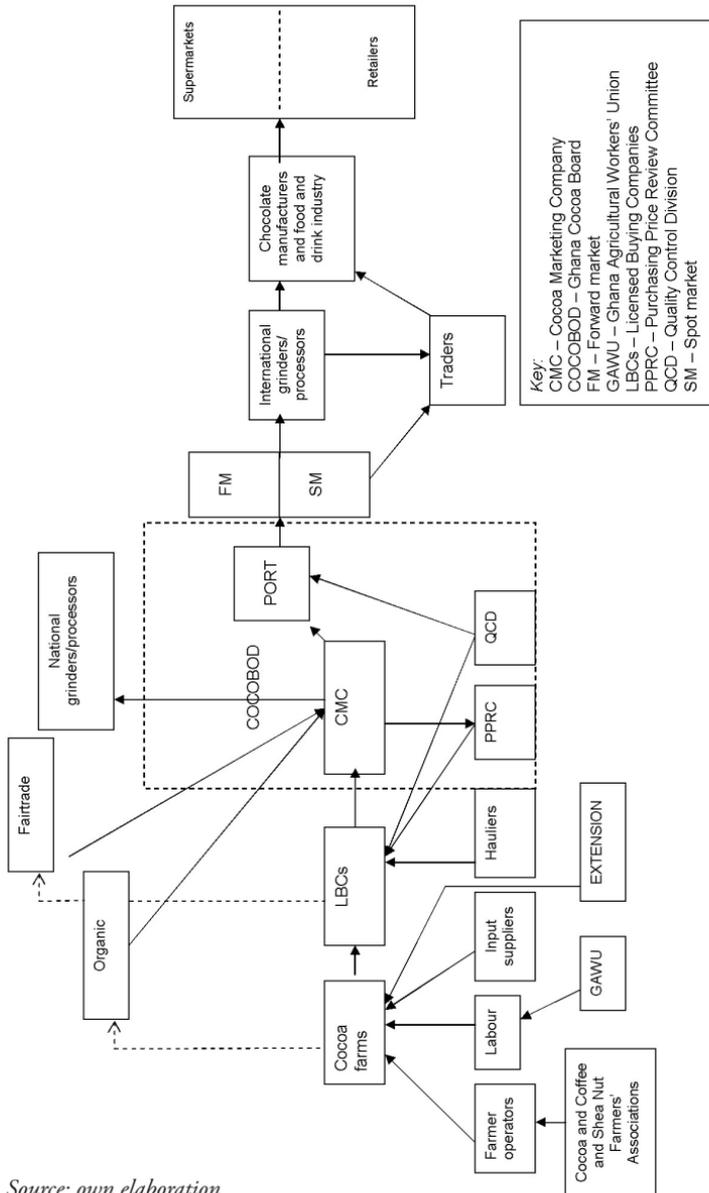
Ghana needs to expand output if it is to meet the increasing demand for high-quality cocoa and maintain cocoa as a key source of export earnings. However, the country currently faces significant production constraints. The availability of land in which there is sufficient forest canopy cover is limited. Producers comprise aged persons; the youth does not aspire to go into cocoa farming because of non-remunerative returns and their desire to re-locate or remain in urban areas after completing basic education. Productivity in the Ghanaian cocoa sector is low compared to other countries. Average cocoa yields in Ghana are currently estimated at 400 kg per hectare, signif-

icantly below an estimated potential yield of 1,000 kg per hectare or the average yield of about 800 kg per hectare in neighbouring Cote d'Ivoire. COCOBOD is engaged in a number of programmes to raise productivity, including replanting with hybrid seedlings, pests control and the use of fertilizer. Therefore, the challenges Ghana faces are both of an internal and external nature.

COCOBOD plays a pivotal role in linking the large number of small-scale cocoa farmers in Ghana to export markets abroad through its subsidiary, the Cocoa Marketing Company (CMC). Figure 1 depicts the current cocoa value chain within Ghana and its integration into the global chocolate market.

At the export end, CMC undertakes the sale of cocoa on the forward and spot markets, through the day-to-day sales of cocoa beans and products to traders and cocoa processors. The trust vested by buyers in COCOBOD allows it to sell cocoa in advance on the forward market, which rewards it with better prices and greater security than other producer countries. Based on the forward price, COCOBOD is able to project its annual free of board (FOB) price for cocoa each season. The Producer Price Review Committee (PPRC) uses this and the forecast exchange rate to set a minimum producer price each year, which is paid to the farmers, protecting them from price volatility. Table 1 gives a breakdown of production, prices and exports for selected years. This highlights the volatility of the cocoa sector, with a decline in production and exports in 2001/2 when world cocoa prices fell, and a subsequent sharp increase in 2003/4, when prices rose on the world markets.

**Figure 1: Simplified overview of Ghana cocoa value chain**



Source: own elaboration

**Table 1: Ghana cocoa production, exports, prices and payments, 1999–2004**

	1999/2000	2001/02	2003/04
<b>Production</b>	(in 000 metric tons)		
Main crop (Oct-May)	400	321	669
Mid crop (June-Oct)	30	18	68
Total production	430	339	737
Export (beans)	365	232	642
	(in cedis per tonne)		
Producer price (main)	2,250,000	4,384,000	9,000,000
Producer price (light)	2,428,080	6,200,000	9,000,000
	(in millions of cedis)		
Farmer payments	985,665	1,454,316	6,632,775
Export receipts	1,404,226	2,713,663	8,744,512
Ratio of farmer payments to export receipts	66%	67%	69%

Source: IMF (2005); see also COCOBOD (2004)

By 2005/6 the producer price paid by COCOBOD remained at just over 9,000,000 cedis per tonne, and the FOB price paid to farmers had increased to 73% (Government of Ghana 2005). This amount is put aside before other actors in the market get their share, based on their business costs. The government takes the rest. If the actual FOB price falls below the projected price, the government absorbs the difference. When the actual price turns out to be above the projected price then there is a windfall, and a bonus payment is given to farmers at the end of the year. This process shows the central role of COCOBOD in reducing price volatility for farmers.

Whilst pressure to disband COCOBOD was resisted in the 1980s, a degree of competition was introduced through the Licensed Buying Company (LBC) system. The aim was to increase efficiency in the value chain. Initially six LBCs, including PBC in which the government had a majority-holding, were given licences. By 1997 this had increased to nineteen LBCs, with ten of them buying substantial quantities of cocoa.

In 2006 there were 24 LBCs, with sixteen to eighteen estimated to be active. These included two international companies, Olam (which is Singapore-based) and Armajaro (a cocoa trading house based in the UK). Kuapa Kokoo is the only producers' cooperative operating as an LBC, and is also the only Fairtrade-accredited LBC operating in Ghana. The Cocoa Sector Marketing Committee (COSMARC) recommends LBCs for licensing to COCOBOD, monitors their performance and recommends either renewal or withdrawal of licences.

Cocoa is purchased by LBCs under the auspices of COCOBOD. Cocoa farmers sell their cocoa to one of the LBCs operating in their area. The LBCs buy the cocoa at the society buying sheds at village level, where the cocoa is weighed. The cocoa is then moved to the larger district level sheds of LBCs, where the Quality Control Division (QCD) tests and seals the beans in sacks. The LBC is then responsible for organising the haulage of the cocoa to one of three takeover points (Kasse, Tema or Takoradi) at which point CMC pays the LBC. LBCs may give a number of inducements to attract and retain farmers, such as credit facilities, extension services or gifts. Some LBCs also try to pay a bonus at the end of the year to farmers in addition to any bonus paid by COCOBOD. PBC, which continues to be the largest LBC, has an obligation to buy everywhere, and so buys from some of the more remote cocoa growing areas where other LBCs refuse to operate. It offers support to farmers, including the repair of roads and bridges, provision of water and electricity poles.

Although COCOBOD provides assistance to cocoa farmers there are many problems that the farmers face that reduce their efficiency. One major problem is labour and its cost. Hired labour has become scarce in the rural areas due to the rural-urban migration of young people and this has increased the price of rural labour. Due to the advanced age of farmers it is difficult for them to innovate if they cannot afford hired labour. The labour intensiveness of cocoa farming has given rise to sharecropping, through which a tenant farmer cultivates the land and shares the produce or the farm with the landowner in an agreed proportion. Lack of institutional credit has also been a major complaint of farmers and so they often resort to moneylenders in their communities, who charge exorbitant interest on the loans. To surmount their problems and have a common voice to be able to negotiate with COCOBOD and the government, many farmers belong

to the Cocoa and Shea Butter Farmers Association. Through the Association, farmers can obtain some production inputs at prices lower than market prices. The association also takes part in negotiations for the fixing of the producer price for cocoa and provides a platform to protect the interests of cocoa farmers.

To be able to pay a better remunerative price to the farmers, the Government of Ghana intends to increase cocoa beans grindings and manufacturing carried out within Ghana to about 320,000 tons per annum out of the total production of about 700,000 tons per annum. It is doing this through a combination of public and private initiatives. Currently the partly state-owned Cocoa Processing Company, Barry Callebaut, and the German-controlled company, Wamco Mills, process cocoa beans in Ghana. The agribusiness giant, Cargill, started cocoa beans grindings in November 2008 from its 65,000 ton-capacity processing plant in Ghana. The plant has the potential to increase capacity to 120,000 tons. Another global giant, Archer Daniels Midland, is building a processing plant in Ghana with a capacity of 30,000 tons and it is expected to start working in the first quarter of 2009.

#### **4. Quality assurance and niche markets**

COCOBOD plays an active role in coordinating and guiding the sector in relation to supplying the global cocoa-chocolate value chain. This role is most important in relation to overseeing quality assurance and maintaining Ghana's reputation for good quality cocoa as well as a premium price on world markets. It is also an important channel for extending traceability, which is needed to access niche markets, such as Fairtrade, organic and designated origin chocolate, which can earn even higher premiums or social returns. An increasing number of consumers have expressed concern about improving the conditions of farmers and the environment through the purchase of higher price organic and Fairtrade-certified chocolate. Both schemes set standards for production and distribution, but also provide a price premium to participating producers. Whilst they are starting from a low base, in Europe and the US there has been a rapid growth in Fairtrade and organic chocolate, in contrast to slower growth in the conventional cocoa/chocolate market (ICCO 2005, 2006).

The Quality Control Division (QCD) of COCOBOD is involved in pre-buying activities, particularly training LBC staff and increasing awareness amongst farmers regarding quality issues. LBCs do initial quality checks when farmers deliver fermented and dried cocoa beans. LBCs can clean beans to remove bad beans and waste, a process which raises the standard. Once LBCs are ready, they put in an application to QCD for a quality check. The QCD district officers do the next check, determine grades and then seal the bags. The cocoa is then ready for transport to one of the three takeover points. Here QCD does a further sample quality check prior to taking over control of the beans for storage and shipping. There are no foreign quality control officers in Ghana; the EU and US rely on QCD. Quality assurance allows Ghanaian cocoa to command a price premium on international markets, which was approximately 10%, or roughly US\$200-250 per tonne, in 2007. Quality assurance also facilitates advanced selling of Ghanaian cocoa on the forward markets, providing COCOBOD with a degree of security when setting a minimum producer price and reducing volatility for farmers.

COCOBOD thus plays an important role in maintaining the position of Ghana within the cocoa-chocolate value chain. It is not able to immunise cocoa farmers from vagaries of the wider cocoa market, but it is able to provide some kind of buffer. Its engagement has helped to maintain the quality of Ghanaian cocoa, and the resulting premium price has allowed Ghana to capture a higher value than competitor countries. Its ability to negotiate on forward markets has allowed it to set an annual producer price that evens out short-term fluctuations and provides some seasonal stability. However, COCOBOD can only act as a player at the point of export in a value chain that remains dominated by a concentrated group of large processors and manufacturers. To this extent its role is constrained. However, through Fairtrade a small percentage of the Ghanaian cocoa is exported on slightly different commercial terms, aimed at returning a fairer share of the final value back to producers.

Ghana has long been an important exporter of Fairtrade cocoa, through Kuapa Kokoo Ltd. (Kuapa), which is both an LBC and a producer cooperative. Kuapa purchases 7-10% of total output through 1,632 societies with about 45,000 farmer members. It provides farmers with support, information, extension services and a credit union, and is the only Fairtrade-certi-

fied LBC in Ghana (Tiffen et al. 2004). Within the COCOBOD system, a separate channel and warehouse has been designated for Fairtrade cocoa exported by Kuapa, to separate it from conventional cocoa. In 2003/4 Kuapa sold 1,800 tonnes of Fairtrade cocoa, representing approximately 3% of its total deliveries to CMC. Fairtrade cocoa fetches US\$ 150 a tonne social premium and the minimum price should not be less than US\$ 1,600. The social premium earned on Fairtrade exports goes into a Trust Fund for the provision of social amenities. The benefits from the social premium go to the producer cooperative as a whole, and all societies can apply to the Trust Fund for social support.

Fairtrade-labelling is overseen by the Fairtrade Labelling Organisation (FLO). Fairtrade is only 0.2% of world cocoa, but it has experienced high rates of growth, with an annual average growth of 23% between 1996-2006 (ICCO 2007a, 2007b), in contrast to 2-3% in the conventional market. The two largest exporters of Fairtrade cocoa are the Dominican Republic (49% of total) and Ghana (45% of total). Kuapa is also a part-owner of the UK Fairtrade chocolate company, Divine. This has allowed it to operate more directly at the consumer end of the market. Even though Fairtrade is a small percentage of its total sales, Kuapa members say that working through Divine has given them an important understanding of how the external value chain operates. This contributed to Kuapa negotiating to become the sole source of cocoa for the Co-operative Supermarket in the UK, which was the first supermarket to launch its 'own-brand' Fairtrade chocolate range (Barrientos/Dolan 2006; Barrientos/Smith 2007).

Larger-volume chocolate manufacturers have until recently not gone down the Fairtrade-certified route, although some now sell dedicated organic and organic Fairtrade ranges (such as Green & Blacks, which is owned by Cadbury). However, the trend towards more socially and environmentally aware consumption in the middle and upper segments of the chocolate market has promoted the advance of corporate social responsibility amongst some larger-volume chocolate manufacturers. Commercially they are vulnerable to the risk of adverse publicity due to poor social conditions in producing countries. A key challenge is whether large chocolate manufacturers do this in a way that is effective in promoting longer-term sustainability for cocoa farmers and which ensures the product quality required by the mainstream quality segment of the consumer market while

meeting social and environmental standards. COCOBOD not only plays an important role in maintaining quality for the mainstream market, but can also play a pivotal role in negotiating with large buyers exploring higher premium routes. It can liaise with other government departments to promote broader social and environmental conditions for production, and ensure benefits are also reaped by cocoa farmers and their communities.

## **5. Concluding remarks**

Value chain analysis has increasingly been used as a framework for examining the linkages between commercial actors in the cocoa-chocolate sector. The evolving cocoa-chocolate value chain has been characterised as 'bi-polar' in its governance structure, with increasing concentration amongst cocoa processors as well as large brand name chocolate manufacturers. In contrast, production remains characterised by small-scale farming in many countries, particularly in West Africa. Many countries were pressured to dismantle marketing boards under economic liberalisation, thus increasing producer fragmentation. New supplier countries expanded production, particularly in Asia under large scale plantation operations. Oversupply of cocoa contributed to a secular decline in prices, and a fall in the overall quality of cocoa beans. Ghana has not been immune from international trends but resisted pressure in the 1980s to liberalise its marketing system. It has benefited from the continued role of COCOBOD, which has provided support to farmers and coordinated the marketing of Ghanaian cocoa on international markets. COCOBOD plays an important role in protecting farmers, coordinating exports on world markets, and bargaining with powerful commercial firms that govern the cocoa-chocolate value chain.

At the other end of the value chain, processors and manufacturers responded to changing consumer patterns. Consumer tastes have become more nuanced and differentiated by price and quality, with greater segmentation in the chocolate market. Manufacturers and processors have become attuned to growing consumer concerns with social and environmental issues. As a consequence, there is increasing demand from manufacturers serving some markets for the availability of high-quality cocoa that is produced in accordance with international social and environmental stand-

ards. COCOBOD plays an important role in positioning Ghana in this changing market. Its support for farmers has maintained the quality of Ghanaian cocoa, which continues to earn a price premium. More importantly, Ghana's high quality cocoa has meant that it has been able to sell more of its cocoa than other producer countries on forward markets. This facilitates the setting of domestic producer prices by COCOBOD, which protects farmers from seasonal volatility in the markets.

GVC analysis helps to provide important insights into the changing dynamics in the cocoa-chocolate sector, where there is an embedded imbalance between concentrated buyers and fragmented producers. Buyers have been able to capture value both through their greater commercial power and through their more nuanced understanding and targeting of consumer markets. Combined with market pressures and oversupply, fragmented producers have often been subjected to declining prices and rising costs, with adverse implications for quality, social and environmental standards. Fairtrade has helped to address these issues in niche segments of the market. Extending such gains to a wider producer base is more challenging where fragmented producers have little or no bargaining power. COCOBOD could help to promote farmers' interests, quality and sustainability in the higher-premium segments of the global market.

- 1) The authors alone are responsible for all information and views expressed here which do not represent Cadbury. We would like to thank all members of the research team that participated in the project, from which this paper is drawn: Samuel Asuming-Brempong, Daniel Sarpong, Nana Akua Anyidoho, Raphie Kaplinsky and Jennifer Leavy.
- 2) This section draws largely on Barrientos et al. 2008.; please see full report for further details.

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## Abstracts

The cocoa-chocolate value chain is undergoing rapid transformation. It is characterised by increased concentration amongst buyers, with fragmentation amongst producers (largely small-scale farmers in Africa). Commercial pressures are leading to downward prices and quality. However, greater consumer focus on quality, social and environmental sustainability facilitates higher premium prices in some market segments. This paper examines the changing dynamics of the cocoa-chocolate value chain and considers its effects on the development of the Ghanaian cocoa sector. The paper focuses on how the maintenance of a cocoa marketing board (COCOBOD) in Ghana has helped to maintain Ghana's position as a world producer of high

quality cocoa, to negotiate with global buyers and to support small-scale producers. However, a rebalancing of power relations within the value chain is needed if the sustainability of the sector is to be secured.

Die Kakao-Schokolade-Wertschöpfungskette erfährt schnell ablaufende Veränderungen. Sie ist charakterisiert durch eine zunehmende Konzentration bei den Käuferunternehmen (*buyers*) und eine Fragmentierung bei den ProduzentInnen (hauptsächlich Kleinbauern und -bäuerinnen in Afrika). Wirtschaftlicher Druck führt zu fallenden Preisen und sinkender Qualität. Allerdings ermöglicht ein bewusstes Kaufverhalten der KonsumentInnen in Bezug auf die Qualität sowie sozialer und ökologischer Nachhaltigkeit in der Produktion höhere Preise in manchen Marktsegmenten. Der Artikel untersucht die sich ändernden Dynamiken der Kakao-Schokolade-Wertschöpfungskette und deren Effekte auf den Kakaosektor in Ghana. Besondere Aufmerksamkeit erhält das ghanaische Kakao-Marketingboard (COCOBOD), dessen Erhalt dazu beigetragen hat, die Weltmarktposition Ghanas als Produzent hochqualitativen Kakaos zu sichern, Verhandlungen mit *global buyers* zu führen und KleinproduzentInnen zu unterstützen. Allerdings müssen die Machtbeziehungen in der Wertschöpfungskette ausgeglichener werden, wenn die Nachhaltigkeit des Sektors gesichert werden soll.

Stephanie Ware Barrientos  
Institute of Development Policy and Management  
University of Manchester  
Oxford Road  
Manchester M13 9PL, UK  
stephanie.barrientos@manchester.ac.uk

Kwadwo Asenso-Okyere  
Knowledge, Capacity, and Innovation Division  
International Food Policy Research Institute (IFPRI)  
P. O. Box 5689  
Addis Ababa, Ethiopia  
k.asenso-okyere@cgiar.org