Appendix A Determination of Cocoa Prices in Cameroon, Nigeria, Ghana, Côte dIvoire and Indonesia.

Appendix to Report Market Concentration and Price Formation in the Global Cocoa Value Chain

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Market Concentration and Price Formation in the Global Cocoa Value Chain

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1 Introduction

This Appendix to the report "Market Concentration and Price Formation in the Global Cocoa Value Chain" presents the results of the qualitative fieldwork and elaborates on pricing mechanisms in five cocoa producing countries and how public-private interactions have developed over time. For each of the five countries we discuss the following aspects:

- The production chain
- Market developments
- Price mechanisms
- Market concentration
- Negotiation
- Farm-gate price

In Chapter 5 of the report, the results for each country are compared and further analysed.

The data presented in this Appendix contribute to answering the following questions:

- What is the role of companies in the cocoa value chain?
- What is the role of governments of producing countries in the cocoa value chain?
- How do pricing mechanisms differ across the five most important cocoa producing countries (Côte d'Ivoire, Ghana, Indonesia, Nigeria, Cameroon)?
- How do the different local and national pricing mechanisms influence the world market price and vice versa?
- How has the bargaining position of (organised) cocoa farmers changed with respect to cocoa buyers?
- To what extent can different pricing mechanisms (including mechanisms for certified cocoa) guarantee a higher income for cocoa farmers?

The fieldwork in each country was conducted by a local research partner (Table A 1). This qualitative research consisted mainly of in-depth interviews with a small number of key stakeholders; in some countries additional focus group discussions took place. These fieldwork data were complemented, validated and analysed by KIT and SEO. KIT and SEO are responsible for the Appendix.

Data presented in this appendix should be considered as best estimates. The collection of exact data on prices and costs has been challenging, as data were sometimes difficult to obtain and available datasets often conflict. What might have confused things is the different types of pricing and/or different vocabulary used for similar price types.

The list below indicates the different types of prices used in the Appendix:

- FoB 'Free-on-Board' price – Term of sale under which the price invoiced or quoted by a seller includes all charges up to placing the goods on board a ship at the port of departure specified by the buyer. Also called collect freight, freight collect, or freight forward.[1]

[1] http://www.businessdictionary.com/definition/free-on-board-FOB.html (16-09-2016)

- World market price – The price for cocoa as established on the London and New York stock markets.
- Futures market price – Price for a forward contract: the buyer is obliged to purchase an amount of cocoa specified in the contract; the seller is obliged to sell the agreed amount of cocoa.
- Farm-gate price – The price farmers receive for their cocoa. Also called the *producer price*.
- CIF 'Cost, Insurance, Freight' price is a trade term requiring the seller to arrange for the carriage of goods by sea to a port of destination and provide the buyer with the documents necessary to obtain the goods from the carrier.[2]
- ICCO price – The ICCO prices are defined as the averages of the quotations of the three nearest futures contracts on both ICE FUTURES US (New York) and ICE FUTURES EUROPE (London) at the London closing time. They can be used as a proxy for FoB prices

Below we provide details about our local research partners. At the end of this Appendix, an anonymised list of respondents is provided.

Table A. 1 Fieldwork partners

Country	Fieldwork contact	Researcher & Institute[3]
Indonesia	Through Swisscontact, Sustainable Cocoa Production Program Indonesia	Annie Ambarawati, Socio-economist of Agriculture, Agribusiness Study Program, Faculty of Agriculture, Udayana University, Bali Indonesia
Ghana	Through Sudwind Institute	David Kpelle (program director) and team Africa Cocoa Coalition
Côte d'Ivoire	Through CIRAD	Wadjamsse Beaudelaire Djezou (PhD) Economiste/CIRES
Cameroon	Through CIRAD	Jules René MINKOUA NZIE, Ph D, Chargé de Cours, Département d'Economie Publique , Groupe de Recherche en Economie, Environnement et Agro-alimentaire (GREEA), Unité Stratégies et Politiques d'Innovations pour la Sécurité Alimentaire (SPISA)
Nigeria	Through Sudwind Institute	Fabunmi Mopelola and team Farmers Development Union (FADU)

Source: KIT and SEO

2 http://www.investopedia.com/terms/c/cif.asp

3 The fieldwork partners cannot be hold responsible for the way their contributions have been integrated in the Appendix.

A.1 Cameroon

Table A. 2 Fact sheet Cameroon

Fact sheet Cameroon	
Number of Farmers	160,000
Member of farmers organisations	<10%
Number of Coxeurs	1,000
Number of licensed buyers	35
Number of exporters	33
Number of processors	2 (1 large company)
Market share largest exporters	70%
Teclar Cocoa LTD	34%
STE Olam CAM SA	19%
CAMACO	11%
ETS Nondongo Essomba	10%
Export destination	Percentages
Netherlands	78%
Indonesia	7%
Belgium	7%
Malaysia	4%
Quantity exported (tonnes)	214,000
FoB price USD//tonne)	2600
Percentage of FoB to farmers	72.6%
Percentage of FoB to intermediary traders	2%
Percentage of FoB to exporters	17%
Percentage to government (excluding taxes)	8%
ICCO price (nominal in US$/tonne) (2014/2015)	3057
Percentage of ICCO price to farmers (2014/2015)	80%
Average farm size (ha)	1.9
Average yield subsistence farmers (kg/ha)	250
Average yield entrepreneurial farmers (kg/ha)	500
Average yearly production subsistence farmers (kg)	800
Average yearly production entrepreneurial farmers (kg)	1350
Average household size	7
Market organisation (Regulated or Liberalised)	Liberalised

Source: Kamdem et al. (2010), Fieldwork Cameroon (2016)

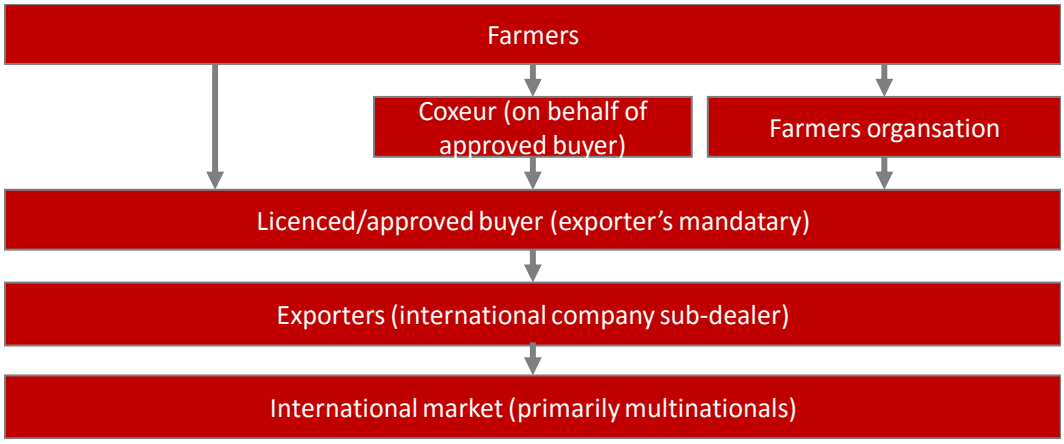
Cameroon production chain

In Cameroon the cocoa market is liberalised. Farmers sell their cocoa to approved (or licensed) traders/buyers. There are three different marketing channels: 1) directly, 2) via coxeurs[4] or 3) via farmers organisations (FOs). The licensed buyer sells the cocoa to an exporter, who in turn sells

[4] Coxeurs are in-between traders (or middlemen) who work for approved buyers on a commission basis. They come to farms to collect the cocoa (Kamdem et al., 2010)

it on the international market (see Figure A 1) (Kamdem et al., 2010; 2013; Fieldwork Cameroon, 2016).

Figure A. 1 Farmers have three channels to sell their cocoa



Source: Kamdem et al. (2010; 2013); Fieldwork Cameroon (2016)

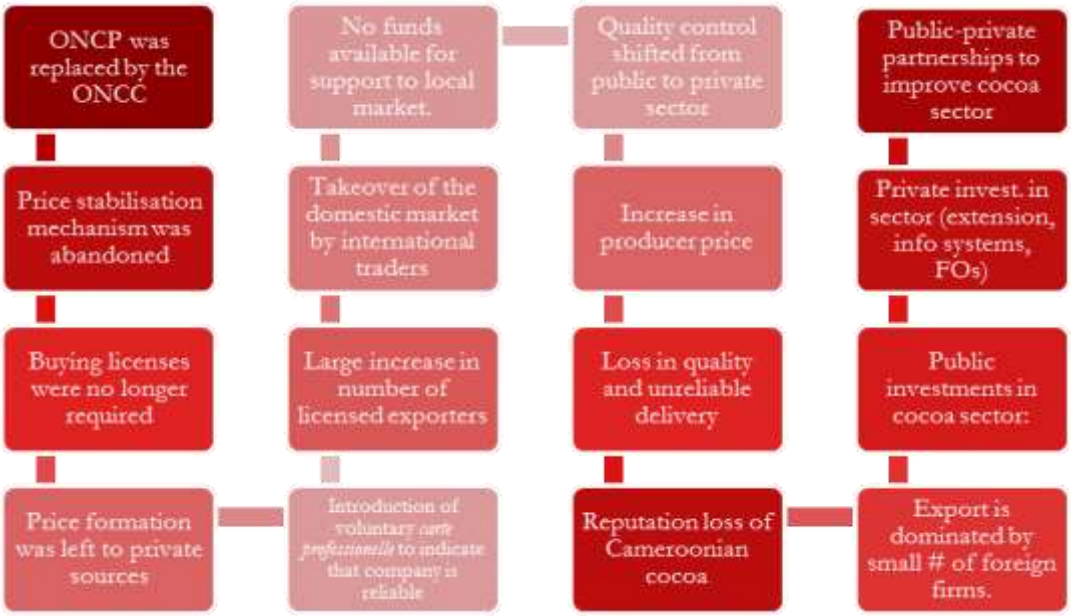
Not all farmers use the three available marketing channels equally. In the two major production zones, the Centre and Southwest, about 50% of the cocoa is marketed via a coxeur (Kamdem et al., 2010). Coxeurs often operate in areas where it is difficult for famers to transport the cocoa themselves. They generally work on behalf of intermediate buyers (Fieldwork Cameroon, 2016). In the Centre, the other 50% of transactions are made through an FO, with a minor fraction being traded directly with an approved buyer. In the Southwest, however, there are no FOs, possibly because projects supporting producers' initiatives have been absent in this region. Instead, the other half of the transactions are directly conducted between the producer (farmer) and the approved buyer. It is important to note that it is primarily large farms which are able to sell to an approved buyer directly (Kamdem et al., 2010).

The approved buyer hence receives the cocoa directly from farmers, from coxeurs who operate on their behalf, or from FOs. Generally, licensed/approved buyers work on a mandate from exporter companies. This formal relationship between buyer and exporter is required by law. Because of this contract, approved buyers do not have the option to choose which exporter they want to sell their cocoa. The exporters, in turn, also have contractual obligations towards international companies to whom they supply their cocoa (Fieldwork Cameroon, 2016).

Market developments

In Cameroon, prior to reforms, the *Office National de Commercialisation de Produits de Base* (ONCPB) governed the supply chain from a monopoly position. The ONCPB organised the trade and sector finance, prices and marketing margins were fixed. In the 1990s, reforms were introduced rapidly in Cameroon, which had an effect on prices, quality and costs of inputs and on the organisation of trade.

Figure A. 2 Market reforms in Cameroon



Source: different authors in Laven 2010

Market reforms have had an impact on price mechanisms and price development in different ways:

1. The price stabilisation mechanism was abandoned. Initially this resulted in an increase in the farm-gate price for farmers. Another result was an increase in price fluctuations.
2. The loss in quality and reliability affected price development and the reputation of Cameroonian cocoa.
3. Export has become dominated by a small number of foreign firms. Exporters set the quality standards and the price, using the world market price as a benchmark.
4. Farmers often find themselves in a weak bargaining position vis-à-vis buyers (Gockowski, 2008) particularly when they are bound to a buyer or when they sell their goods outside the main harvesting period (September to December), as there are fewer buyers around during this period.

As a result of the reforms the role of the government has been reduced. The government, through its cocoa and coffee sub-sector development fund (CCODEF), is involved as funder of cocoa projects to promote, for example, rehabilitation and improve seedlings. In an agreement between the development fund and the ministry of trade, a market information system was set up to disseminate accurate local and international price information. The system is not updated on a regular basis. The government also provides services to cocoa farmers, such as training. Currently, the available public and private sector service provisions do not reach the majority of Cameroonian cocoa farmers. According to fieldwork in Cameroon it can be estimated that around 30% of farmers are reached by services from the private sector (like credit, inputs and training) and less than 20% of the farmers is reached by public sector services (primarily extensions and training). These are generally the farmers that are close to the administrative units where governmental support is supplied. They can use connections available to them through

their farmers organisations. Some also have their own ways to contact officials (Fieldwork Cameroon, 2016).

Price mechanisms

In Cameroon there is no public price mechanism. The price is determined at the market, at three stages:

1. At the global level: the world market price is set through the futures exchange.
2. At the national level: the exporter that sources locally sets his own price to local buyers, after removing his assumed operating costs (transportation, salaries, warehousing, etc.). The world market price is used as a benchmark.
3. At the local level: the local buyer negotiates his own price with the farmer (organisation), after removing his assumed operating costs.

In a liberalised market, market shares can vary, depending on levels of the FoB price, exporter costs, government royalties, etc. In 2016 cocoa farmers in Cameroon received on average 73% of the FoB price. The market share for intermediate buyers is on average 2%, for exporters on average 17% and for government (royalties) around 8%. Prices are the result of negotiation between buyers and suppliers (Fieldwork Cameroon 2016). If the ICCO prices are taken as a benchmark, farmers in Cameroon get a share as high as 80% of the FoB price.

In Cameroon there are different marketing arrangements between FOs and exporters in place:

1. **Negotiation between FOs and exporters**. The FO communicates at the beginning of the cocoa season to different exporters when the cocoa will be aggregated. Each exporter and FO negotiates quantity, quality and price in advance (two or three days before the deal)
2. **Spot bidding**. The exporter (or local buying agent) with the highest bid buys all the cocoa of the FO.
3. **Buying contract**. In this case the FO agrees to sell all or a major part of its production to the same buyer. The deal can last no longer than three years. Price agreements are not part of this arrangement.
4. **Certification**. FO receives a premium for certified cocoa supply from the exporter.
5. **Spot market**. For unorganised markets or landlocked cocoa areas, cocoa prices are negotiated on the spot.

Increasingly there are also other types of arrangements between farmers (organisations) and exporters. These arrangements aim to consolidate 'exclusive' supply relations, through offering 'free' services in exchange for cocoa. For example:

- **Inputs on credit**. This service is provided by exporters to the FO partner, allowing farmers to buy various farm inputs. FO repays after the selling of the cocoa.
- **Training on GAP and certification**. International companies (such as Cargill working together with the exporter Teclar) have implemented training sessions on good farming practices and certification. The access to the service is "free" for FOs and large producers that sell the cocoa to the exporter.

Market concentration in Cameroon

In the two regions Centre and Southwest, there were 160,000 farmers in 2010. In the same year, about 1,000 coxeurs were active in those regions. These coxeurs sold their cocoa to 35 approved buyers (Kamdem et al., 2010). From the fieldwork it is clear that there are only four large exporters in terms of market share, of which two export over 50% of the total amount of cocoa, namely Teclar with 38% and Olam with 19%. The third and fourth largest exporters export around 10% each. There is only one large processor: Sic-Cacaos, the Swiss local subsidiary of Barry Callebaut[5] (Fieldwork Cameroon, 2016). In the 2014-2015 cocoa season, Sic-Cacaos purchased around 24,000 tonnes. The second processor is *Chocolateries Confiseries du Cameroun* (Chococam), which purchased in this same period around 1,600 tonne[6]. Chococam is specialised in the manufacturing of chocolate-based products and various sweets from cocoa mass and has a domestic market share of 55%[7]. The fieldwork results show that the competition between exporters to get larger amounts of cocoa is high, resulting in price competition. There are also signals from the field that exporters sometimes make price agreements (within the agreed price range), for example by "dividing the market into cocoa zones". The next example illustrates this: "within the locality of Obala (Lekié division, Center region of Cameroon) there is a weekly auction for cocoa: a particular exporter/buyer with the best bid, within the allocated price range, buys the available cocoa supplied by FOs. Sometimes exporters can also strategically agree not to participate in an auction in order to reduce price overheating maintained by FOs."

Negotiation

There are two important variables when negotiating prices: the quantity and quality of cocoa. The higher the quantity, the higher the price; the better the quality, the higher the price. An additional variable is the location of the community; higher transaction costs can affect the producer's price.

A recent study proposed two ways in which farmers could obtain higher prices:

- Collective marketing by FOs. This is particularly true when FOs use cocoa auctions or engage in a certification programme.
- Strengthen the individual bargaining power of producers. Farmers who produce a large quantity or cocoa with a higher quality may have increased bargaining powers (Fieldwork Cameroon, 2016).

Collective marketing provides indeed a leverage for bargaining. Farmers that unite in an FO receive a price that is (on average) about 8% higher than the price received by individual farmers (Kamdem et al., 2013). However, collective bargaining also involves costs; so higher prices for the cocoa do not automatically result in (equally) higher prices for the individual farmers. Collecting and bulking small producers' outputs at the village level can reduce transaction costs (because of economies of scale). Overall, the negotiating power of farmers organisations is known to be poor in Cameroon, with many active farmer groups but most of them being weak (Cameroon Fieldwork 2016).

5 http://www.agenceecofin.com/agriculture/0309-32027-cameroon-short-term-aim-for-grinding-capacity-of-more-than-100-000-tons-of-cocoa-per-year (10-06-2016)
6 http://www.businessincameroon.com/agriculture/2903-5359-sic-cacaos-and-chococam-ground-25-370-tonnes-of-cocoa-in-late-february-2015 (11-09-2016)
7 http://www.iso.org/iso/home/standards/benefitsofstandards/benefits-detail.htm?emid=27(11-09-2016)

There are a number of limiting factors that reduce farmers' bargaining power:

- The numbers of traders in an area
- The arrangement with the buyer. It happens that farmers take an interest free loan from buyers and repay this in cocoa, which reduces the freedom to sell to other traders at a potentially higher price (Kamdem et al., 2010).
- FOs sometimes have difficulty getting established and, if they do, they also face problems in organising themselves to market their members' products.
- FOs sometimes operate very effectively and obtain relatively high prices though acquiring only a relatively small share of the quantities produced by their members.
- There is no clear agreement between farmers and buyers about the meaning of "quality"; buyers are the ones that decide what the quality is. This leads to arguments and distrust as the quality of cocoa can affect the price (Fieldwork Cameroon 2016; Fule, 2013)[8].
- For local buyers, their negotiation power (to negotiate their margin of the FoB price) is also limited as they are obliged to sell to a particular exporter or the same set of intermediary traders operating in the areas of cocoa production. The exporter often has many licensed buying agents in the field. The buyer can only sell the collected cocoa surplus to another exporter when financial constraints are present.

> *Both buyers and farmers experience a lack of information regarding each other's reservation price and ability to wait for a better transaction. However, if buyers are aware that farmers need cash quickly, for instance at the start of the school year, they can take advantage of this by demanding a lower price (Kamdem, et al., 2010).*

Officially there is a public information system (Systeme d'Information des Filieres Cacao et Café au Cameroun, or SIF) that is supposed to give daily information on prices. The project has a website[9] and uses various means to communicate information (community radio, internet, newspaper, etc.). In practice this system is not updated regularly. The SIF gives minimum and maximum purchasing prices of exporters in Douala[10]. The farm-gate price is determined on the spot within this price band. Due to the low bargaining power of farmers, they are unlikely to receive the maximum price even if they are well-informed (Fieldwork Cameroon, 2016). For the final buyer, the price information is given by information flows from the terminal markets, usually through Reuters.

Our local research partner indicates that "the common behaviour is that farmers/FOs try to sell their cocoa to the fairest buyer among those ones well-established in that area, when it's possible" (Fieldwork Cameroon, 2016). Although Cameroonian farmers and FOs are generally portrayed as price-takers there is some anecdotal evidence that farmers have at least some bargaining power, although limited. For example, it occasionally happens that Cameroonian farmers decide to put their cocoa sales on hold when prices are perceived to be too low or that they manage to get

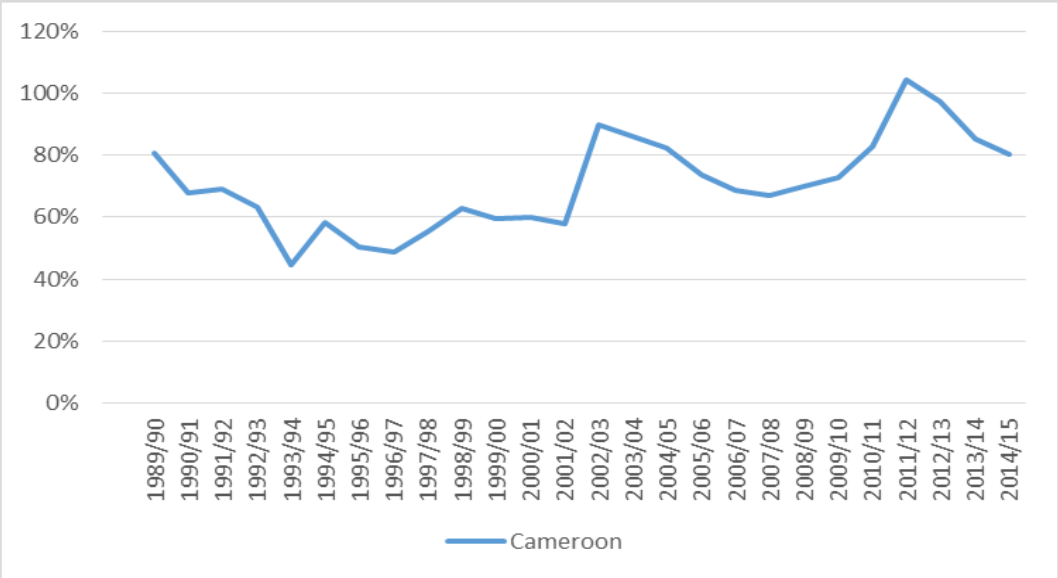
8 http://www.cocoaconnect.org/sites/default/files/publication/SmallScale%20versus%20large%20scale%20coco%20farming%20in%20cameroon.pdf (10-6-2016)
9 The website domain is www.sifcameroun.org
10 http://sifcameroun.org/index.php/en/ (10-6-2016)

better prices through group sales[11]. There have also been rumours that farmers try to obtain higher prices by selling *illegally* to Nigerian buyers, bypassing the Douala seaport.[12]

Farm-gate price

Figure A.3 shows the development of the farm-gate price as a percentage of the world market price. It appears that, since the liberalisation of the cocoa market in 1994, the price has become more volatile. From 2001, the relative farm-gate price moved to a higher level, even approaching 100 percent of the FoB. The explanation for this high price was a potential risk of a local shortage of beans, as exporters had to execute certain contractual obligations. In recent years the relative farm-gate price in Cameroon declined again to more normal levels.

Figure A. 3 The farm-gate price in Cameroon as a percentage of the world market price



Source: ICCO

The fieldwork in Cameroon shows a difference between costs, revenues and profits for entrepreneurial farmers versus more subsistence farmers. The following descriptions were used:

- An entrepreneurial farmer is somebody with a good knowledge of agricultural production and marketing and the ability to manage a farm.
- A subsistence farmer is someone whose annual income lies under the poverty line, who is mainly engaged in food crop farming in order to feed the household, and whose farm size is not larger than 2 ha (Fieldwork Cameroon, 2016).

It is calculated that the costs of cocoa production (both the fixed costs as the variable costs) are lower for entrepreneurial farmers, allowing them to make a higher profit. Not many farmers in Cameroon produce certified cocoa; the results from the fieldwork indicate that less than 5% of the farmers is producing certified cocoa. Within this percentage, no distinction between subsistence and entrepreneurial farmers can be made (Fieldwork Cameroon, 2016).

11 http://www.businessincameroon.com/agriculture/0205-4810-the-fraudulent-sale-of-cocoa-beans-peaks-in-cameroon (11-09-2016)
12 http://www.globalissues.org/news/2016/08/28/22434 (11-09-2016)

Table A. 3 Costs, revenues and profits of cocoa production for subsistence and entrepreneurial farmers

Costs (EUR/kg)	Subsistence farmer	Entrepreneurial farmer
Total fixed costs	0.21	0.16
Equipment	0.15	0.12
Provision of depreciation	0.06	0.05
Total variable costs	0.58	0.27
Labour	0.40	0.22
Inputs	0.19	0.05
Total costs	**0.79**	**0.43**
Revenue (EUR/kg)		
Total revenue	2.21	2.21
Cocoa sales	2.21	2.21
Total Profit (EUR/kg)	**1.43**	**1.78**

Source: Fieldwork Cameroon (2016), Ngoucheme (2014)

Conclusion Cameroon

There is no public pricing mechanism in Cameroon. Prices are determined by market forces. The world market price is used as a benchmark. Changes in the world market price translate relative quickly into farm-gate prices.

Farmers in Cameroon receive 72.6% of the FoB. Based on ICCO prices, farmers in Cameroon get 80% of the FoB price. Farmers receive a high share of the FoB price, although they are not always able to negotiate this share.

A price range (min and max) is given daily by an official information system but the effective farm-gate price is set on the spot within that price band. Farmers might be well informed about the price interval but might not be strong enough to get the maximum price. Their ability to negotiate depends on a number of factors:

- The marketing channel they access
- Their location (related to transaction costs)
- The quality of the cocoa
- The (aggregated) volumes of cocoa

In Cameroon, farmers are merely price-takers and the power of buyers (exporters) is great. There are only four large exporters in terms of market share, of which two export over 50% of the total amount of cocoa, and there is only one large processor. There are examples of how exporters can make different price arrangements. However, there are also examples of how farmers manage to bargain for better prices.

There are different types of trade arrangements between FOs and exporters, and there is active communication and bargaining. It has been noticed that the strength and nature of a relationship between farmers and exporters in a given area can move prices. The majority of the farmers however is not organised and sells the cocoa to a coxeur; larger farmers sell directly to exporters.

Since the liberalisation of the cocoa sector, the role of the private sector has increased. Apart from trade, companies are involved in service provision. Increasingly there are arrangements between FOs and exporters. These arrangements aim to consolidate 'exclusive' supply relations through offering 'free' services in exchange for cocoa.

The government also provides services to cocoa farmers, such as training. It is estimated that around 20% of the farmers are reached by these services, while around 30% of farmers are reached by services from the private sector (like credit, inputs and training),

A.2 Nigeria

Table A. 4 Fact sheet Nigeria

Fact sheet Nigeria	
Number of registered farmers	450,000
Member of farmers organisations	20-30%
Number of intermediate traders and licensed buyers	250,000
Number of (effective) exporters	20
Number of processing facilities	17
Quantity produced (tonnes) (2014/15)	195,000
Processing capacity (tonnes)	155,000-220,000
Quantity exported (tonnes) (2014/15)	113,000
FoB price Naira/tonne)	500,000-700,000
FoB price $/tonne	3,000
Percentage of FoB to farmers	65-70%
Percentage of FoB to broker	7%
Percentage of FoB to local buying agents	9%
Percentage of FoB to exporters	9%
ICCO price (nominal in US$/tonne) (2007/2008)	2516
Percentage of ICCO Price to farmers (2007/2008)	75%
Average farm size (ha)	2,8
Average yield conventional farmers (kg/ha)	370
Average yield certified farmers (kg/ha)	490
Average yearly production subsistence farmers (kg)	1,030
Average yearly production entrepreneurial farmers (kg)	1,370
Average household size	6,5
Market organisation	Liberalised

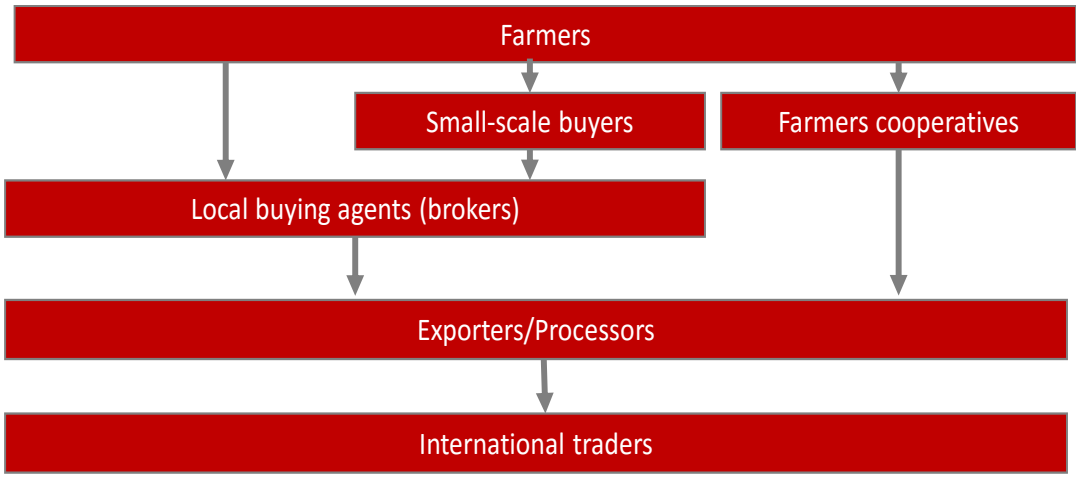
Source: Nzeka, 2014; Fieldwork Nigeria, 2016; ICCO Quarterly Bulletin of Cocoa Statistics

Nigerian production chain

Three marketing channels are distinguished in Nigeria (Table A.4):

1. First marketing channel: farmers sell their beans to small-scale buyers (community middlemen), who in turn sell them to local buying agents (LBAs). These LBAs (or brokers) sell the beans to local exporters.
2. Second marketing channel: farmers sell their beans directly to LBAs. Most farmers sell to middlemen, since they do not produce quantities that are large enough to sell to LBAs directly (Nkang et al., 2007). Also, due to poor infrastructure, transport costs are often too high for farmers to transport the beans themselves (Cadoni, 2013).
3. Third marketing channel: farmers sell their beans through farmers organisations (cooperative societies) directly to exporting firms (Cadoni, 2013).

Figure A. 4 Three marketing channels can be distinguished for farmers



Source: Nkang et al. (2007), FAO (2013), Fieldwork Nigeria (2016)

Market developments

Nigeria was the first West African cocoa producing country to fully liberalise trade in 1986 (Ndubuto et al., 2010; Cadoni, 2013). The country liberalised over-night: dismantling the Nigerian Cocoa Board, deregulating the internal and external marketing system and abolishing its price-controls. In Nigeria, buyers of cocoa no longer required a license and quality control was abandoned.

Figure A. 5 Regulation and market development in Nigeria

Source: different authors in Laven 2010

Market reforms have had an impact on price mechanisms and price development in different ways:

1. The price stabilisation mechanism was abandoned and farmers were no longer protected against high price fluctuations. The loss in quality and reliability affected demand for Nigerian cocoa.
2. With the establishment of the Cocoa Development Committee (CDC) the government tried to regain control of the coordination of the supply chain, with the aim to increase the volumes of cocoa production.
3. Cocoa exports have become dominated by a small number of foreign firms. Exporters set the quality standards and the price, using the world market price as a benchmark.
4. Producers often find themselves in a weak bargaining position vis-à-vis exporters and buyers. Collective bargaining through FOs brings some bargaining leverage for farmers.

Currently the market structure in Nigeria poses a number of challenges for the cocoa value chain, such as:

- The public investments in distribution of inputs to farmers have not resulted in adequate supply of inputs to farmers.
- The infrastructure is poor, both in terms of road networks as well as with regards to trade information and warehousing facilities.
- Local cocoa transport is subject to taxation; every state has its own taxation, which results in multiple taxes.
- Price fluctuations and instability.
- Local exchange rates and high inflation rates.

Price mechanisms

In Nigeria there is no public price mechanism. Prices are determined through the forces of demand and supply at the terminal or international market.

Prices in Nigeria follow international prices but can vary from location to location and throughout the buying seasons. Variables that influences prices are the concentration of cocoa in a certain region and the volumes available. For example, in Alade and Idanre, two of the most important cocoa producing communities in Ondo state, farmers receive higher prices and other benefits (Fieldwork Nigeria 2016). Farmers that are certified receive a small premium for their cocoa.

According to estimates of one of the largest cocoa processors, farmers currently receive between 65-70% of the FoB price. Exporters receive around 9%, licensed buying agents receive 9% and middlemen receive approximately 7% of the FoB price. According to data of ICCO, farmers received around 75% of the FoB in 2007/2008.

Currently, the farm-gate price is perceived by the farmers as relatively high ("it is the best year"). For 2015/2016 the farm-gate prices are between 500,000 and 700,000 Naira per metric tonne; the high prices are drawing farmers (back) into cocoa. There are three main concerns:

- There is no guarantee that the prices will remain relatively high.
- Production costs are high.
- Inflation rates are high.

Table A. 5 Increasing farm-gate prices in Nigeria

Farm-gate price	Naira/metric tonne
2015/2016	500,000-700,000
2014/2015	480,000
2013/2014	570,000
2012/2013	450,000
2011/2012	450,000
2010/2011	520,000

Source: Nzeka 2014; Fieldwork Nigeria, 2016.

According to representatives of FOs, price information has improved significantly in recent years. During interviews it was highlighted that, while before farmers where subject to exploitative local buyers, with new local buyers coming from their own community, the situation has improved. Farmers are able to access price information (world market prices displayed at electronic boards), mainly through (buying) partners and farmers organisations, and/or can get real time price information on their mobile phones (Fieldwork Nigeria, 2016).

While the world market price is more transparent than before, price differences between communities and the market mechanisms are rather unclear (Fieldwork Nigeria, 2016).

Market concentration

Cocoa exports in Nigeria are dominated by three firms: Agrotrader Nigeria Ltd, Cocoa Products Nigeria Ltd, and Stanmark Cocoa Company Nigeria Ltd. (Agrodep 2014). Other companies that are considered to be market leaders are: Tulip Cocoa Processing, Olam, Succden, Starlink, Bolawole, Saros, and Karire. Tulip Cocoa Processing company is owned by the Dutch Company Theobroma, established in 2006[13].

What has given these companies a competitive advantage is their location (they are all located in Ondo state, the largest cocoa producing state in the country) but also their investments in the supply chain and direct relations with farmers. In order to ensure a regular supply of high quality cocoa beans, some export firms are assisting cocoa farmers through the supply of agrochemicals, equipment, seedlings, and soft loans. Below you will find some examples of how exporters provide support to farmers and consolidate their position:

- **Stanmark Nigeria Ltd** has organised around 42 cocoa farming communities into cooperative societies. Stanmark Nigeria Ltd buys cocoa direct from the farmer groups.
- **Agrotrader Ltd** provided a $15 million loan (the largest loan given so far by a single cocoa exporting/processing firm in Nigeria) to boost cocoa beans exports. Through the loan, the firm was able to alleviate the credit constraints of many farmers; farmers received the fund as bonds from local buyers working for the export firm.

The Nigerian government has put in place Export Expansion Grants (EEGs) for Nigerian export firms to protect them from any failure of formal financial institutions to meet their credit needs.

13 http://www.theobroma.com/tulip-cocoa/factories.

The EEGs are supposed to pay non-oil exporting firms about 30% of their export value in the form of a tariff and duty waiver. However, the scheme has been plagued by irregular payments.

In Nigeria the local cocoa market is said to be dominated by exporters' buying agents, in which processors 'struggle' to obtain beans. This is used as an argument to explain the over-capacity among processors (Fieldwork Nigeria 2016). Although the correctness of this argument seems unlikely, the over-capacity among processors is a fact; since 2011, the eight main processing companies have run at only 25 to 27 percent of installed capacity.

Cocoa processing in Nigeria is said to be further hampered by the trade agreement with the European Union. Nigeria is the only country in West Africa yet to sign the Economic Partnership Agreement protocol on free trade by the EU and African, Caribbean and Pacific countries. This makes cocoa butter and cake from Nigeria less competitive in the international market, resulting in a direct loss of revenue for the local processing industry. In 2014, the cost for Nigerian cocoa-processing companies to export cocoa products to Europe was said to be inflated by 30 percent because of the new trade agreement with the European Union; "Nigerian cocoa butter and cake exports were charged between 4.2% and 6.1% of FoB values as taxes at EU ports."[14]. These nominal tariffs of around 5% result in effective tariffs of around 30%. A government plan to encourage exports of agricultural products with subsidies ranging from 5 to 15 percent has been slow to come into effect[15].

Negotiation

Many cocoa farmers have a contract with the exporters with whom they deal. Some of these exporters, however, have established agents in the cocoa farming localities to directly take on the risk involved in purchasing and dealing with farmers. This means that negotiation takes place at different levels:

- The international buyer bargains with a local exporter/processor
- The local exporter/processor negotiates with local buying agents (LBAs) (middlemen)
- The LBAs negotiate with farmers

In cases where farmers are organised, there is some room for price negotiation. Fieldwork indicates that negotiation becomes easier when:

- farmers sell certified beans
- cocoa production is concentrated in certain regions
- volumes offered are higher

In Nigeria there is a 'missing market' for product quality. Quality premiums for product quality are not passed back to cocoa farmers. Premiums for certified cocoa are paid to farmers.

Farm-gate price

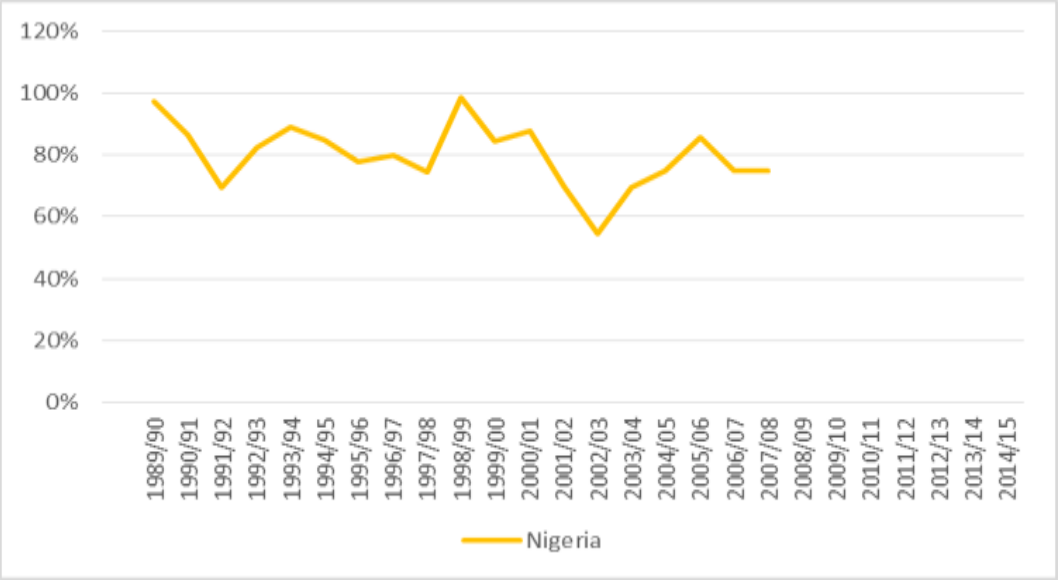
Figure A.6 shows the farm-gate price in Nigeria as a percentage of the word market price. Unfortunately, data for the period after 2007 are not available. The figure shows that the farm-

14 http://www.bloomberg.com/news/articles/2014-10-21/nigeria-cocoa-processors-face-cost-barriers-to-eu-exports

15 ibid

gate price in Nigeria fluctuates between circa 60 and 100 percent of the world market price for cocoa. In nominal terms the farm-gate price is influenced by exchange rate changes leading to sudden changes in the nominal farm-gate price (not shown in Figure A.6).

Figure A. 6 The cocoa farm-gate price in Nigeria as a percentage of the world market price[16]



Source: ICCO

Conclusion Nigeria

There are no public pricing mechanisms in Nigeria. The farm-gate price in Nigeria is estimated to be currently between 65-70% of the FoB price; the world market price is used as a benchmark. While the world market price is more transparent than before, the reasons for price differences between communities are rather unclear (Fieldwork Nigeria, 2016). If ICCO prices are taken as a benchmark, Nigerian cocoa farmers receive 75% of the FoB.

In Nigeria, cocoa prices have been rising in recent years, which is said to have pulled farmers back into cocoa. Price stability, however, is not secured and production costs remain high. Moreover, prices can vary from location to location and throughout the buying seasons. Variables that influences prices are the concentration of cocoa in a certain region and the volumes available.

Since the liberalisation of the cocoa sector, the role of the private sector has increased. Increasingly, cocoa exporters invest in direct relations with FOs from whom they buy. Cocoa export is dominated by three firms. Whenever farmers are organised there is some room for price negotiation but farmers remain price-takers. Fieldwork indicates that negotiation becomes somewhat easier when: farmers sell certified beans, cocoa production is concentrated in certain regions, and volumes offered are higher

As a result of the reforms, the role of the government has been reduced. The government aims to revive its role and has been putting structures in place, like the EEG, to support the cocoa

[16] Data on export prices are still required to provide a better image.

sector financially. However, these schemes are ineffective. The government is also involved in service provision to farmers, such as financial services, the distribution of inputs and seedlings but the impact of these investments is questioned: "whether these services ever reach farmers, we don't know" (Fieldwork Nigeria 2016).

A.3 Ghana

Table A. 6 Fact sheet Ghana

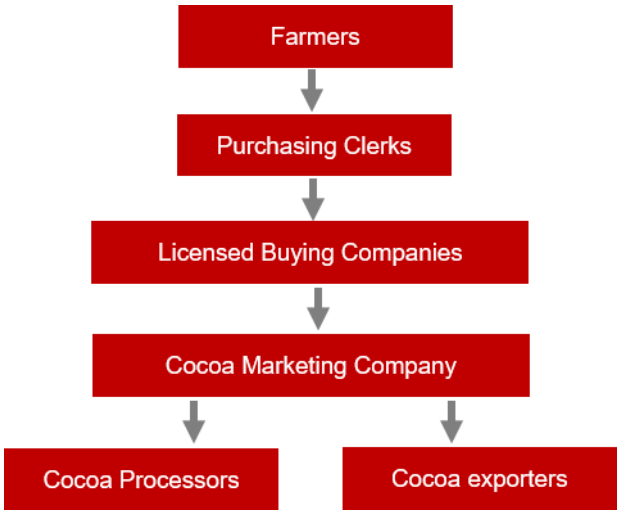
Fact sheet Ghana	
Number of Farmers	850,000
Member of farmers organisations	35%
Number of licensed buyers (include non-active LBCs)	41
Number of exporters (Cocoa Marketing Company)	1
Number of processors	7
Quantity exported (tonnes)	900,000
FoB price (USD/tonne)	2435
Percentage of FoB to farmers	70%
Percentage of FoB to hauliers	3%
Percentage of FoB to licensed buying companies	8%
Percentage of FoB to COCOBOD	9%
ICCO price (nominal US$/tonne) (2014/2015)	3057
Percentage of ICCO price paid to farmers	48
Average farm size (ha)	2.50
Average yield conventional farmers (kg/ha)	400-500
Average yearly production subsistence farmers (kg)	1,125
Household size	4-6
Market organisation	Regulated (CMC has monopoly on export)

Source: Fieldwork Ghana (2016); Vigneri & Santos (2007);

Ghanaian production chain

Figure A.7 below shows the marketing chain for cocoa beans in Ghana. There is only one marketing channel in Ghana and that is through the Cocoa Marketing Company (CMC), which is a subsidiary of the state-owned Ghana Cocoa Marketing Board (COCOBOD). CMC sells part of its cocoa to local processors but most goes to the international market.

Figure A. 7 Marketing channels for Ghanaian cocoa

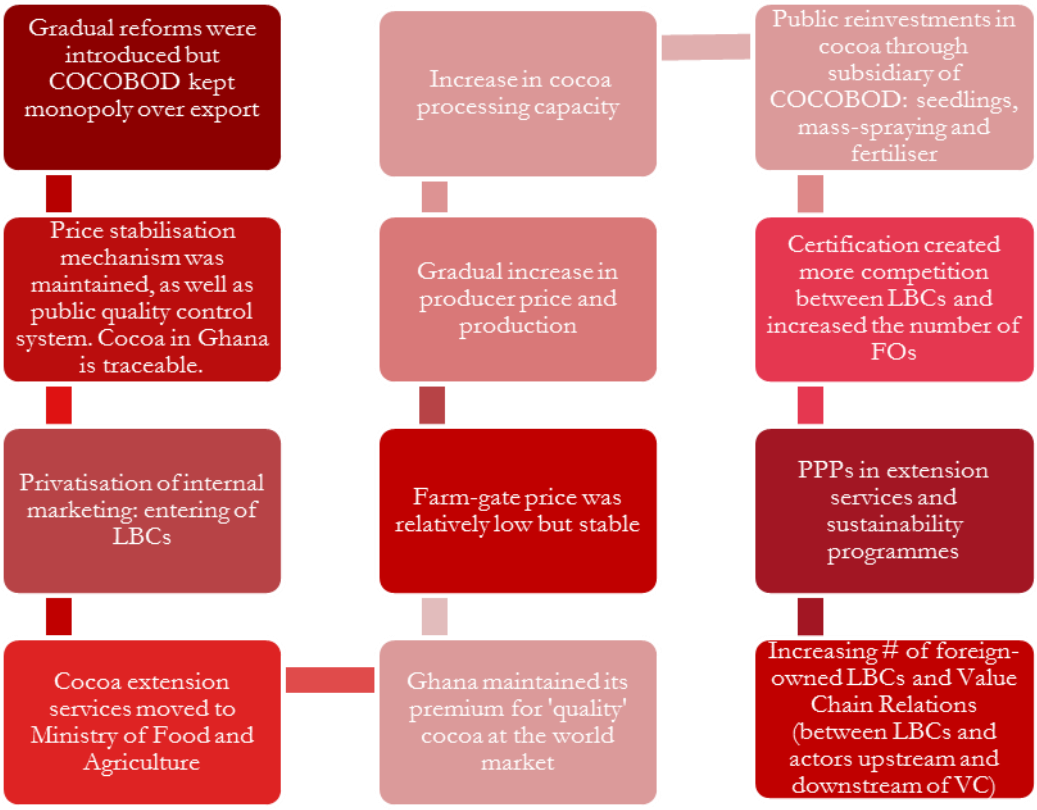


Source: Laven (2010)

Market developments

Ghana is unique amongst cocoa producing countries in the way that it has gradually (and only partially) introduced reforms in the cocoa chain. Despite the international pressure to reduce the role of the government in the overall supply chain, the Ghanaian government, through CMC, kept its monopoly on the export of cocoa and remained in charge of quality control (COCOBOD's Quality Control Division). The system of price-stabilisation continued. As part of the reforms, internal marketing was privatised and started in 1992 with the introduction of private Licensed Buying Companies (LBCs) as competitors to the state-owned buyer PBC. Formally these LBCs are not 'owners' of the cocoa but rather provide buying services for which they receive a fixed margin of the FoB price.

Figure A. 8 Regulation and market development in Ghana



Source: different authors in Laven 2010; Laven and Boomsma, 2012.

The gradual reforms have had an impact on price mechanisms and price development in different ways:

- Since 2001, the farm-gate price in Ghana is determined by a multi-stakeholder platform called the Producer Price Review Committee (PPRC)
- The PPRC sets the farm-gate price annually.
- Ghanaian cocoa fetches a higher price on the world market because of its quality, uniformity and volumes.
- There is no price differentiation in place for (other types of) quality cocoa (e.g. origin, fine flavour). Certified cocoa does receive a premium price.
- There is no room for price negotiation in the cocoa supply chain.
- The farm-gate price was initially low but stable. The farm-gate price of cocoa per tonne in Ghanaian Cedi has almost increased sevenfold over the past nine years. However, if one takes inflation and depreciation of the exchange rate into account, only a small upward trend can be distinguished.
- Cocoa production has followed this increase in price (usually delayed). There is evidence that farmers respond to prices by changing the intensity with which they tend their farm (Laven 2010).
- Currently the farm-gate price is annually fixed at 70% of the FoB of forward sales by COCOBOD; the realised farm-gate price as percentage of the ICCO price was recently only 48% (2014/2015).

- An annually fixed percentage of the FoB price is allocated to reinvestments in the cocoa sector: for example, input distribution and extension services.
- An annually fixed percentage of the FoB price is allocated to operational costs.

COCOBOD continued to intervene in the sector, using partly the same instruments as in the period between 1980 and the year 2000. Competition on price is still not possible in Ghana. With certification, a major change has been that COCOBOD allowed certified cocoa to be kept physically segregated from the financial flow of cocoa. This opening up of the trade has made it possible for buyers to shorten their value chain and interact directly with farmer groups. Certification increased competition. Certification also went hand-in-hand with an increase in the number of FOs.

Price mechanisms

Since 2001, the farm-gate price in Ghana is determined by the PPRC, a multi-stakeholder platform (Darkwah & Verter, 2014). The PPRC consists of representatives of the Ministry of Finance and Economic Planning, Cocobod, Bank of Ghana, Quality Control Commission, Cocoa Marketing Committee, LBCs, Cocoa Hauliers Association and Ghanaian Cococoa, Coffee, Sheanut Farmer Association (GCCSFA).

The PPRC annually determines the percentage of the implied FoB price that farmers receive. This is done by calculating the net revenue of COCOBOD based on the price of cocoa futures and anticipated sales and then deducting industry related costs (including the margin for cocoa traders, storage costs, jute sacks for transport, COCOBOD overhead, quality control etc.). The sharing of the projected net FoB price in 2011-2012 is projected in Table A.7.

Decisions by the PPRC involve decisions on farm-gate price, buyers' margin and other rates and fees. Yearly, a percentage of the gross FoB[17] is put aside to cover industry costs for projects and the procurement of logistical materials for internal marketing operations. During the 2011-2012 cocoa year this was 6.6%, an equivalent of more than 260 million GHS (>140 million US$). This included costs for disease and pest control, fertiliser distribution, costs involved in jute sacks, child labour certification, scholarship fund and farmer's pension scheme.

COCOBOD is mandated by the PPRC to establish a stabilisation fund to be used to avoid significant fluctuations in the producer price of Ghana. In 2011-2012 the stabilisation fund was set at 0.58% percent of the net FoB. Theoretically this fund can compensate farmers in the case the world cocoa price drops below the set price (Quarmine et al., 2014; Mulangu et al., 2015).

The annual producer price increased from 56% of the FoB in 1998/99 to 70% in 2004/05 (Ministry of Finance 1999) and 76% in 2011/12. Currently the farm-gate price is annually fixed at 70% of the FoB of forward sales by COCOBOD; however, the realised farm-gate price as a percentage of the ICCO price was recently only 48% (2014/2015). The farm-gate price is $1,789 per tonne, while the international market price is about $3,500 per tonne, meaning farmers receive less than half the actual world price for cocoa (as the ICCO price indicates). The price for a bag of cocoa beans in 2014/2015 is GHS 425 ($ 112)/64 kg.

[17] In Ghana there is a distinction made between the NET FoB and GROSS FoB.

Table A. 7 Composition of the projected Net FoB price in Ghana (2011)

Cost Items	% of Net FoB price
Producer Price	76,04
Stabilisation Fund	0,58
Buyers' Margin	7,94
Hailers' Cost	3,25
Storage & Shipping Cost (CMC)	1,05
Disinfestation/Grading/Sealing/Check Sampling Costs (QCC)	1,45
Crop Finance	0,85
Scale Inspection and Phytosanitory	0,01
Government/Cocobod	8,64
Farmers' Housing Scheme	0,02
Replanting/rehabilitation (cocoa)	0,13
Replanting/rehabilitation (coffee)	0,04
Total	**100**

Source: COCOBOD (2011)

Despite the multi-stakeholder process and the publication of the decisions of the PPRC, transparency is debatable. There is a lack of clarity concerning the following aspects of the pricing mechanism:

- How are prices being composed?
- What is the rational behind this decision?
- What is the difference between gross and net FoB? What is the rational behind this difference?
- What happens with the currency exchange rate; farmers are paid in local currency while the forward sales are done in a foreign currency?

Moreover, there are serious concerns about the effectiveness of public expenditures in pest and disease management, provision of seedlings and fertiliser distribution. For example, a recent presentation during UNCTAD Global Commodities Forum 2013, by COCOBOD's Director Research, Monitoring & Evaluation, indicates that the provision of services (e.g., procurement and distribution of fertilisers) are best handled by the private sector as fertilisers do not reach farmers on time; "COCOBOD is unable to execute these efficiently and creates opportunities for patronage and rent seeking behaviour"[18] (see also Laven 2010). In this presentation it is stated that "mass spraying of cocoa farms has become an avenue for the pilferage and sale of the subsidised inputs on the open market".

Apart from inefficiencies, another concern is that cocoa in Ghana has become a political crop. It has been argued that political interference is very common in the mass spraying programme because political district heads are in charge of the task forces. This explains at least partly why inefficiencies are not being solved, as the fear is that 'unpopular' measures will cost votes.

[18] http://unctad.org/meetings/en/Presentation/SUC_GCF2013_18-03-2013_Ebenezer-TEI-QUARTEY.pdf

Negotiation

As the price is fixed, there is no price negotiation possible in Ghana:

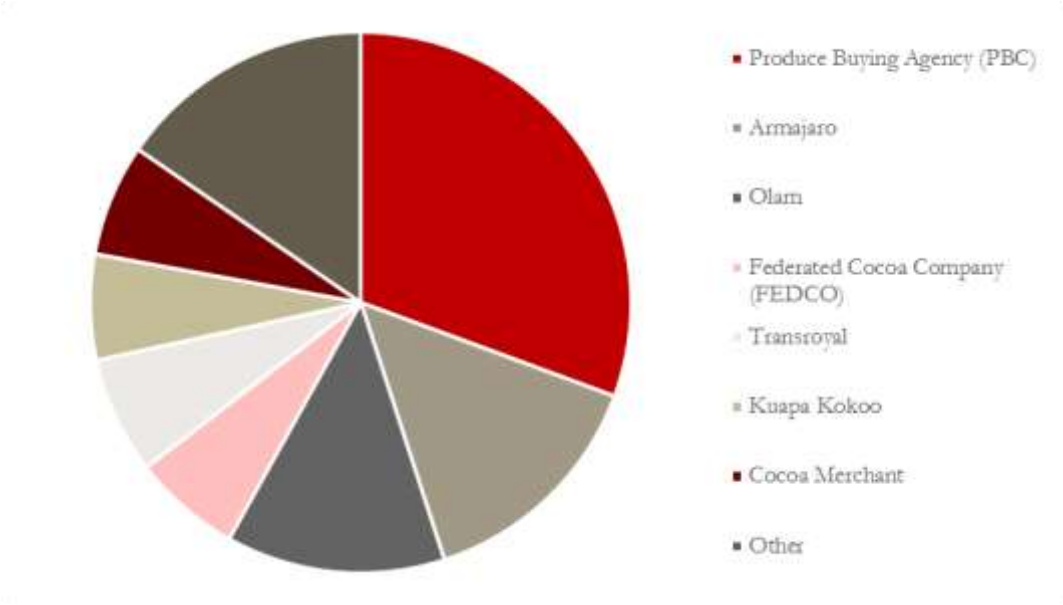
- In Ghana there is no price differentiation for cocoa of different quality, except for defaulted cocoa. The price for cocoa beans in Ghana is the same for well fermented, well dried and well stored cocoa beans (if applicable).
- LBCs are not allowed to buy cocoa below the producer price and are not encouraged to pay farmers more than the fixed price. LBCs receive a fixed buyer margin for their services. In 2002-2003 this margin was set at 9% of the FoB; in 2011-12 the margin was set at 7.94 %. LBCs use this margin to pay their Purchasing Clerks (PCs) that buy cocoa at the community level on commission basis.
- Local buyers can only compete on volume (instead of prices or quality). This is said to have affected the incentive for LBCs and PCs to be very strict about quality control and it induced PCs to cheat farmers with wrongly adjusted scales used for weighing cocoa (see also Laven 2010)

Certification has introduced more competition in the sector; LBCs compete for the better-organised farmers. Certified farmers receive (part of a) voluntary premium. This premium, which is put on top of the farm-gate price, is shared between cocoa farmers, certificate holders, and possibly other business partners, including COCOBOD. The height and distribution of the premium is subject to negotiation. Research conducted in 2010 (Laven and Boomsma 2010) indicated that it is common for farmers to receive at least 50% of the premium. This premium is not always paid in cash to the farmers as (part of) the premium can also be put in a social fund.

Market concentration

Most LBCs are still locally owned but an increasing number is foreign owned. Figure A.9 gives an overview of the market shares of the largest buying companies ('other' includes 33 companies, all with a market share of less than 5%).

Figure A. 9 Cocoa bought and delivered by largest buying companies



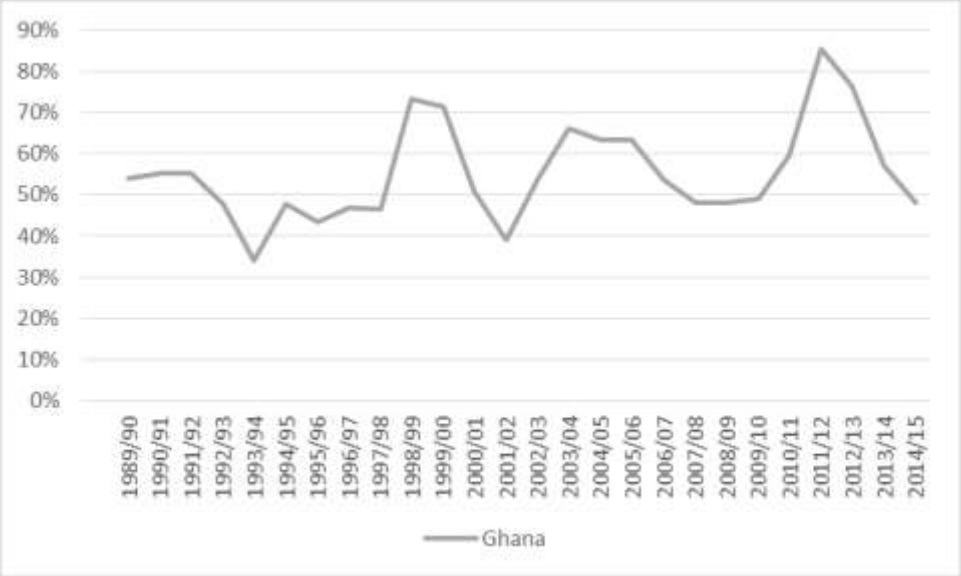
Source: Fieldwork Ghana (2016)

Also the number of international processors of Ghana cocoa has increased, as the world's largest cocoa processing companies Barry Callebaut, Cargill and ADM outsourced part of their processing facilities to Ghana.

Farm-gate prices

In Figure A.10, the farm-gate price of Ghanaian cocoa beans is shown. This price is presented as a percentage of the world market price for cocoa and seems to fluctuate quite strongly. The regulated annually fixed price just stabilises the nominal farm-gate price but is not able to prevent changes in terms of international price movements. The increase and dip in the price between 1998 and 2001 can be correlated with the transition from COP to FoB price setting under the multi-stakeholder PPRC (Darkwah & Verter, 2014; Quarmine, 2014). In recent years the percentage declined to circa 50 percent. This can partly be explained by the volatility of the world market price but also by the rapid depreciation of the Ghanaian cedi.

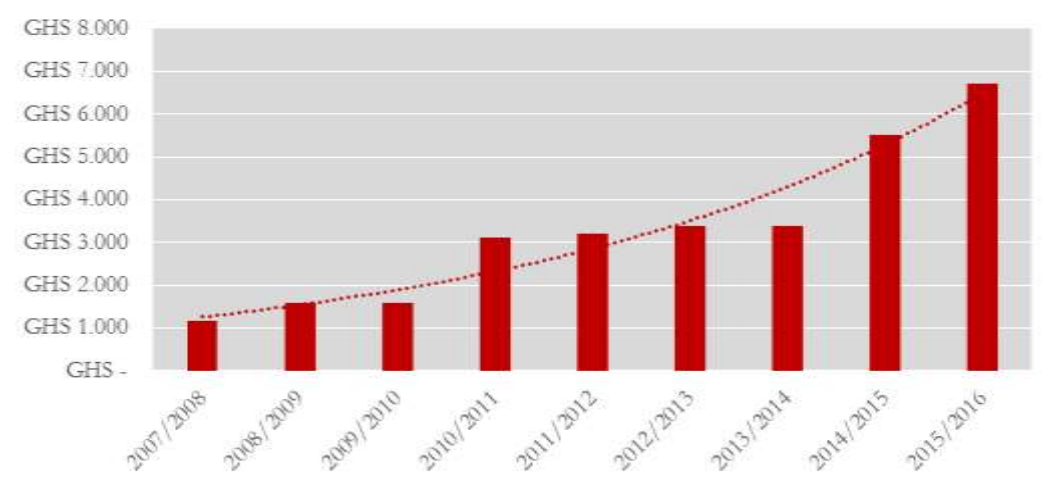
Figure A. 10 Farm-gate prices in Ghana as a percentage of the world market price



Source: ICCO

In nominal terms the farm-gate price of cocoa per ton in Ghanaian Cedi has almost increased sevenfold over the past nine years. However, if one takes inflation and depreciation of the exchange rate into account, only a small upward trend can be noticed. A small upward trend also emerges for the share of the world market price received by the cocoa farmers.

Figure A. 11 Farm-gate price of cocoa per tonne in GHS



Source: Ministry of Finance Ghana (2012; 2014) Ghana Cocoa Board (2015), Spy News Agency (2013), The African Report (2011).

Figure A. 12 Farm-gate price of cocoa per tonne corrected for inflation in USD

Source: Ministry of Finance Ghana (2012; 2014), Ministry of Finance Ghana (2012) Ghana Cocoa Board (2015), Spy News Agency (2013), The African Report (2011), Ghana Statistical Service (2016), Oanda (2016)

Conclusion Ghana

In Ghana the market is regulated and prices are annually fixed. Initially, the partial reforms protected farmers in Ghana from price fluctuations and helped to maintain Ghana's high quality standards. COCOBOD, which falls under the Ministry of Finance, is the main coordinator of the supply chain and one of its subsidiaries (CMC) has a monopoly on marketing the cocoa. COCOBOD takes a high percentage of the FoB to cover operational costs and to do reinvestments in the sector. In theory, the partial reinvestments from taxes in the cocoa sector could benefit farmers (and processing industry, getting a 20% discount on light-crop beans!).

However, it turns out that the (potential) benefits do not seem to outweigh the costs. Although the farm-gate price has increased over time, the real prices that farmers received over time hardly increased in value. In Ghana, farmers receive less than half the actual world price for cocoa, which is substantially lower than in most other cocoa producing countries. Meanwhile, COCOBOD takes a considerable margin of the FoB price to cover costs. The public reinvestments (e.g. input distribution) in the cocoa sector lack transparency and efficiency and have not resulted in significantly higher productivity levels. COCOBOD's failure to deliver is directly at the expense of the farmers. Because of its high stake in cocoa production and marketing, it has been argued that cocoa has become a political crop. That explains partly why inefficiencies in the sector are not being solved, as the fear is that 'unpopular' measures will cost votes.

The number of FOs has increased over time, often related to certification and with a close relation to an LBC. Benefits of being a member of an FO do not translate into higher prices (as the farm-gate price is fixed) but help to negotiate:

- Higher premiums for certified cocoa
- More (tailor-made) services, such as training
- Access to inputs (on credit)

- Investments in community development

The LBCs that participate in certification schemes invest in farmer relations and support farmer groups, for example with training and inputs (on credit) in exchange for the cocoa. These LBCs are financially supported by international processers/traders and chocolate manufacturers that would like to establish more direct sourcing relations with farmers. Some chocolate manufacturers that do not source locally have set up farmer groups that they train and they also invest in community development (pre-competitive). The locally operating purchasers of cocoa compete mainly on the basis of providing (small) services to farmers, including small loans and gifts, and maintaining social relationships with the farmers.

A.4 Côte d'Ivoire

Table A. 8 Fact sheet Côte d'Ivoire

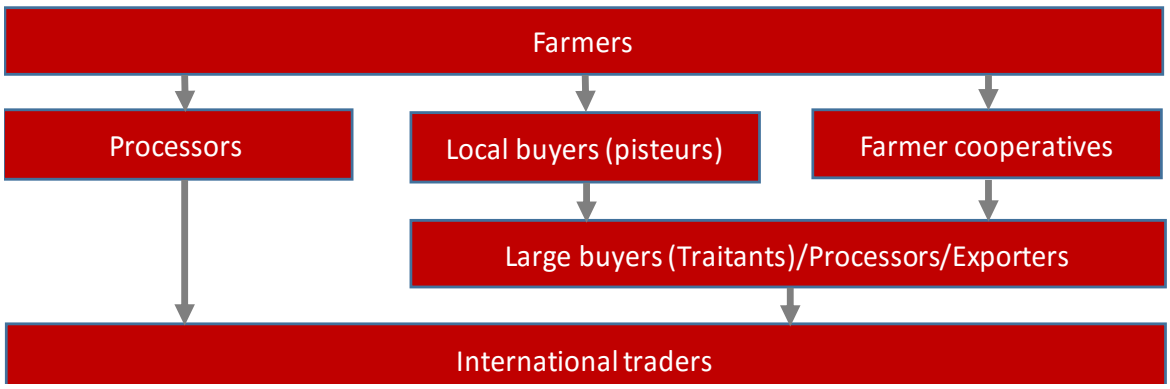
Fact sheet Côte d'Ivoire	
Number of farmers	650,000-800,000
Member of farmers organisations	30-50%
Number of local collectors	500
Number of local traders (traitants)	100
Number of processors	12
Processing capacity in tonnes	720,000
Percentage of processing capacity used	70
Quantity produced (beans/tonnes)	1,450,000-1,800,000
Percentage of CIF price to farmers	60
Percentage of CIF price to government (excluding taxes)	22
ICCO Price (nominal US$/tonne) (2014/2015)	3057
Percentage of ICCO price to farmers (2014/2015)	53
Average farm size (ha)	3-5
Average yield (kg/ha)	450-660
Average yearly production (kg)	2,200
Household size	9
Market organisation	The price is regulated but trade is not controlled by the government

Source: Fieldwork Côte d'Ivoire (2016); Aidenvironment, New Foresight and IIED, 2015.

Ivorian production chain

In the Ivorian cocoa chain, farmers sell their crop to three different links in the chain. Farmers can sell their crops to domestic processing companies, to private buyers or market them through FOs. While the latter two sell unprocessed cocoa beans to an exporter, the former sells processed cocoa products directly on the international market.

Figure A. 13 Marketing chain in Côte d'Ivoire



Source: Agritrade (2012); Fieldwork Côte d'Ivoire (2016)

Market developments

Before 1999, the cocoa price was set by the Caisse de stabilisation (CAISTAB), the state-owned marketing board. Through export taxes, the marketing board gained 38% of the export earnings from cocoa. According to Hecht (in Vellema et al. 2016: 231) some was reinvested in the cocoa sector but most went to a small elite, mainly within the government and industry in Côte d'Ivoire. The Caisse intended to stabilise the producer price and protect farmers from price volatility. This was done by firstly determining the CIF price and then subtract estimates of freight and insurance costs, export tax, CAISTAB operating costs, marketing costs (including profit for agents), and the farm-gate price. Higher-than-anticipated cocoa prices resulted in a surplus, lower prices in a shortage. This way, CAISTAB could be seen as a buffer to remedy price volatility. However, after an extended period of lower-than-expected cocoa prices in the 90's, the policy proved unsuccessful. In 1995, Côte d'Ivoire began to liberalise the cocoa market and in 1999 CAISTAB was abolished (Gibson, 2007).

Between 1999 and 2012, Côte d'Ivoire had a fully liberalised cocoa market. During this period, the producer prices became more volatile but saw an increase. However, due to the abolishment of CAISTAB, the quality of the cocoa beans deteriorated, resulting in a loss of quality premium (Malan, 2013). After a decade of liberalisation, the taxes on cocoa still amounted to nearly 40% of the export price in the beginning of the 2000s (IMF/GoCdI 2002b in Vellema et al. 2016).

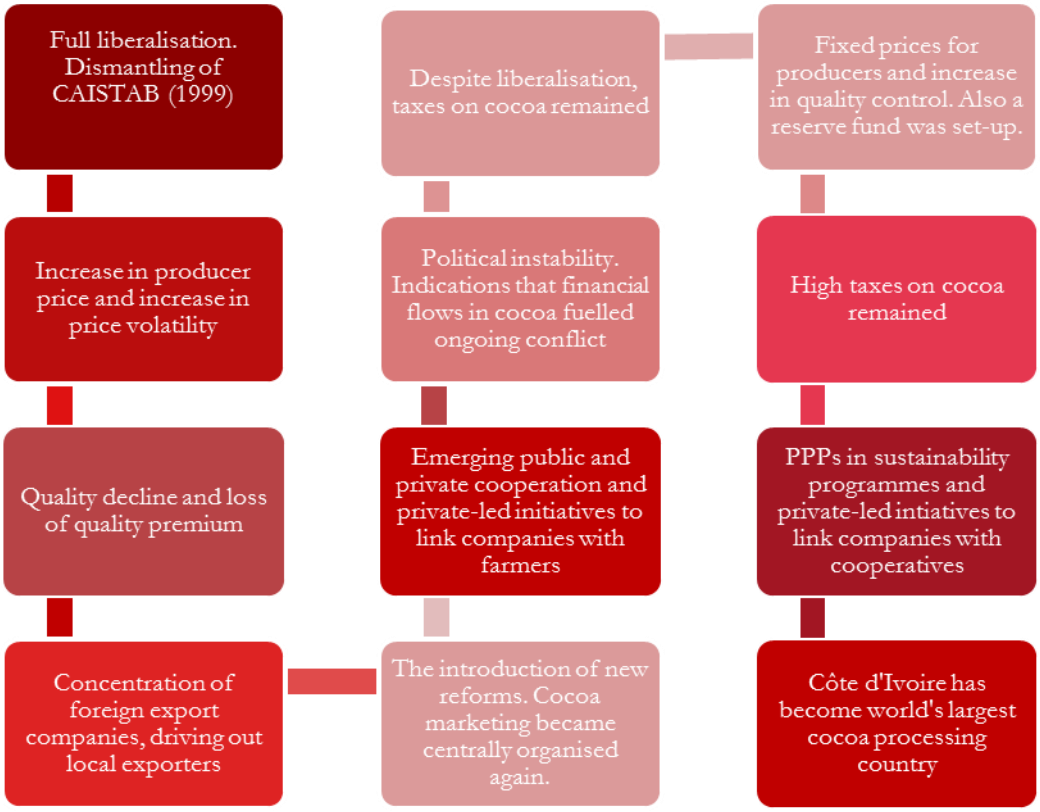
As a precondition for an IMF backed debt relief deal, the new government of Alassane Ouattara, elected in November 2010, launched new cocoa reforms on 2 November 2011 (Agritrade 2012). It was announced that the aim of the reforms was "to raise and guarantee minimum farm-gate prices on a sustainable basis in order to ensure sustainable livelihoods to cocoa growers and encourage them to boost output and reinvest in their ageing and sometimes neglected plantations", by:

- setting a guaranteed minimum farm-gate price
- a stricter control of bean quality
- a marketing mechanisms based on forward sales through auctions.
- suppression of the tax incentive, which benefits local grinders (Agritrade 2012; Econbank 2014 in Bonjean and Brun, 2016: 346).

Since 2011, the marketing of cocoa is again organised centrally. The CCC (Conseil du Café-Cacao), which is a cocoa board comprised of representatives of relevant stakeholders[19], is responsible for the management, regulation, development and price stabilisation of cocoa (Agritrade, 2012).

[19] The CCC has directors on the following fields: production, marketing, sustainability & partnerships, technical operations, sales, financial & accounting, export and statistics, monitoring & planning (http://www.conseilcafecacao.ci)

Figure A. 14 Reforms in Côte d'Ivoire



Source: Different authors in Laven 2010; Vellema et al, 2016; Fieldwork Côte d'Ivoire

Price mechanisms

The annual farm-gate price is determined by the price of forward sales through a PVAM (Programme of Anticipated Sales) (Malan, 2013). These sales take place in twice-daily auctions that start at the end of January and end in August, just before the new crop year. During these auctions, about 70 to 80 percent of next year's crops are sold to exporters. The resulting average forward price is used as a benchmark price for next year's crops. A minimum of 60 percent of the CIF price is guaranteed as price to farmers (Agritrade, 2012). In effect, this is a fixed price for the season that follows.

There has been criticism on how the CCC allocates export-licenses to local entrepreneurs. It has been argued by different international traders that the criteria for handing out these licenses are not well defined and opened the door for abuse; around 10% of licenses are given to local companies ("often friends or relatives" / "people with influence") below market-value and they do not have to pay any deposits. According to an international trader, "these advantages translate in higher prices that outbid international players. For example, they sell with 70 pounds above market price where before prices were 20-30% under the market price. […] These practices put the system at risk as it creates a disconnect between prices paid on the internal market and the

international market: the higher prices do not reflect an increase in quality". Another risk is that prices are not being secured with off-takers and contracts cannot be executed[20].

To ensure the stabilisation of the farm-gate price for cocoa farmers, a reserve fund has been set up (Agritrade, 2012; Malan, 2013). This reserve fund can contain up to FCFA 70 billion to protect against possible drops in cocoa prices in the future. In September 2012, Côte d'Ivoire had paid around FCFA 50 billion into this fund (Agritrade, 2012). It is questionable whether the reserve fund will be large enough to stabilise prices, considering the large volumes of cocoa production in the country.

While the government provides price stability and quality control, they do not provide many other services. In Côte d'Ivoire, the taxes for cocoa have been constantly high. It is not transparent on how those high taxes are being used and how that translates into benefits for farmers. There are indications that, just like in the early days, the elite still benefits from the reforms more than the farmers (Interviews with representatives of chocolate industry during WCC 2016).

Market concentration

Before the introduction of the new reforms, there was a concentration in trade in Côte d'Ivoire, particularly among foreign exporters. The foreign exporters drove out local independent exporters, whose market share declined significantly (from 43% in 1997/98 to < 30% in 2010/11). During the 2010/2011 marketing year, the three leading cocoa multinationals in the world, Cargill, ADM and Barry Callebaut, purchased over 40% of the Ivorian cocoa production (Bonjean and Brun, 2016: 344). Part of this production was grinded by these same companies in the country of origin, part was exported and further processed in cocoa consuming countries.

This concentration can partly be explained by new technologies that created barriers of entry. The development of bulk shipping, which generates important economies of scale, requires large volumes of export. Shipping cocoa in liquid rather than in solid form is also a cost-saving mode that is growing but only the large-scale traders and processors sourcing large volumes of cocoa beans or butter are able to benefit from these economies of scale (Fold 2002; Ecobank 2014 in Bonjean and Brun, 2016: 244).

The concentration of purchasing power does rule out competition: buyers compete to operate at full capacity and to get high quality. Despite the competition, the farm-gate price did not increase between 1999-2011. Bonjean and Brun (2016: 346) mention a number of possible reasons, which should be further verified:

- A decline in the quality of beans
- Export tax
- Informal levies
- Administrative costs of the new regulatory structure set up by the government
- Concentration of buyers, potentially forming a monopsony

[20] http://www.cnbcafrica.com/news/western-africa/2016/09/09/ivory-coast-cracks-down-on-cocoa-contracts-with-paperwork-demand/ (14-09-2016)

In 2013, the grinding capacity in Côte d'Ivoire had reached 665,000 tonnes per year; five multinationals – Barry Callebaut, Cargill, ADM, Cémoi, and Olam – owned 86% of this capacity (Bonjean and Brun, 2016: 344-5). Fieldwork results indicate that in 2016 the GEPEX group (which consists of Cargill, ADM, Barry Callebaut, Olam and Nestle) controls about 80% of the volume of cocoa exports (Fieldwork Côte d'Ivoire, 2016).

Through public-private partnership programmes and through individual sustainability projects, companies invest in their suppliers. Within the chain, agreements and contracts are made. For example, Cargill, the Ivorian Society of Banks (SIB) and FOs work together: Cargill and the SIB make agreements on the financing of trucks, which can be used by farmers organisations to collect and transport the cocoa beans. In return, these farmers organisations sell their beans to Cargill (Fieldwork Côte d'Ivoire, 2016).

Another example is that farmers in Côte d'Ivoire have access to financial support through buyers and traders, although this instrument seems quite ineffective: around 7% of the farmers have access to credits this way.

The private sector also provides training to farmers in cooperation with other actors. For example, Cargill, Nestlé and the IDH started the Coop Academy project, which aims at building capacity (Fieldwork Côte d'Ivoire, 2016). Other Public-Private Partnerships also provide training and extension services, for example through the Quantity Quality and Growth Program (2QC) and the World Cocoa Foundation - Cocoa Livelihood Programme (Fieldwork Côte d'Ivoire, 2016).

Growing concerns by consumers about social and environmental issues have encouraged alliances among buyers to meet environmental standards, to prevent the use of child labour (Bonjean and Brun 2016: 347), and to invest in productivity and community development. Such initiatives potentially improve the position of farmers.

Negotiation

Since the farm-gate price is determined by the government, farmers and buyers do not have much room for negotiation over price. Negotiations, however, can take place over services and access to credit. Although there are many cooperatives, the majority of them is weak. Cooperatives have shown to have little bargaining power.

In 2011-2012 the authorities introduced new reforms "to increase the purchasing power of the cocoa farmers and to protect the farmers from unfair practices". It has been argued that paradoxically, these reforms tend to strengthen the position of the large and well-established traders and grinders by creating new entry-barriers (the tax policy reform clearly discourages new entrants into cocoa grinding) (Bonjean and Brun, 2016). Because of this, the farmers have less room to negotiate since there is less competition. However, larger traders are more likely to be able to provide services and credit extensions and are more often part of PPPs and/or have their own sustainability programmes.

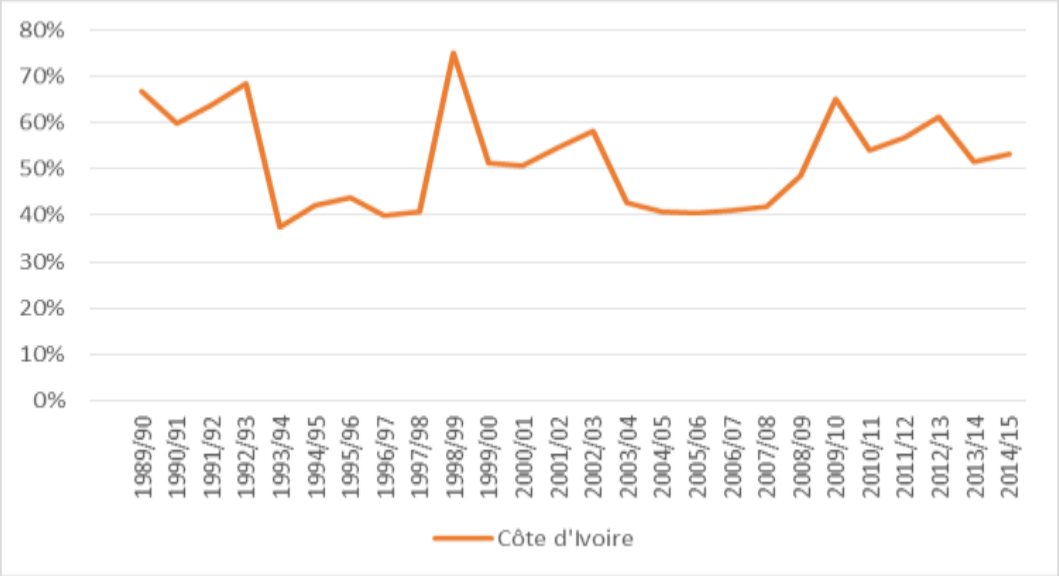
Being the world's largest producer of cocoa, Côte d'Ivoire seems to be in the position to negotiate favourable deals. But, although the international market is vulnerable for fluctuations in Ivorian supply, this does not automatically mean that Côte d'Ivoire has the power to influence world prices. This is illustrated for example by the first 'cocoa war', which lasted from July 1987 till October 1989, where the Ivorian government imposed an embargo on the export of cocoa beans and organised cocoa storage in European warehouses. Instead of being able to boost prices, the government was forced to drastically reduce the price paid to farmers, which resulted in an economic and political crisis, and ultimately in the dismantling of the CAISTAB. One of the reasons why this attempt failed was because of the difficulty in protecting cocoa stocks from humidity (Bonjean and Brun, 2016: 342).

In 2011, the second 'cocoa war' took place. This time the export ban was backed up by the European Union and coincided with the failed coup by rebels from the neighbouring country, Burkina Faso. This time prices did respond. The higher sensitivity and the price increase can be explained by the threat of scarcity. It has been argued that the support from the EU for the embargo led to the price increase. The second cocoa war was preceded by massive purchases of cocoa by the trading company Armajaro, equivalent to 7% of the annual world production in July 2010. These purchases of cocoa contributed to the rise in prices and led to suspicions of insider dealing (Agritrade 2011). The weakness of Ivorian institutions is said to favour collusive behaviour and attempts from privately informed operators to manipulate the market. (Bonjean and Brun, 2016: 343).

Farm-gate price

As can be seen in Figure A 15, the farm-gate in Côte d'Ivoire – expressed as a percentage of the world market price - fluctuated strongly. The Ivorian civil war between 2002-2007 resulted in relatively low farm-gate prices. The introduction of the regulated price in 2011 seems to have stabilised the price to a certain extent.

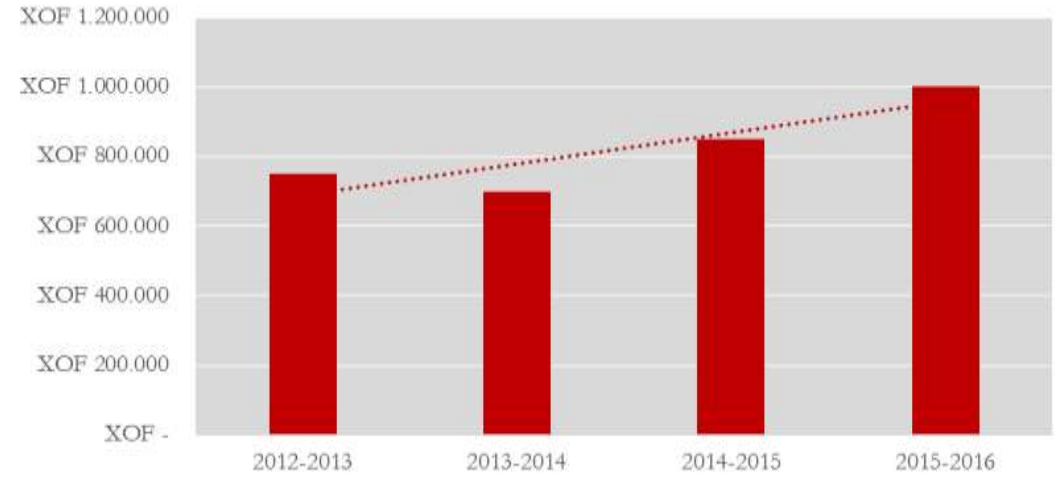
Figure A. 15 The farm-gate price in Côte d'Ivoire as a percentage of the world market price



Source: ICCO

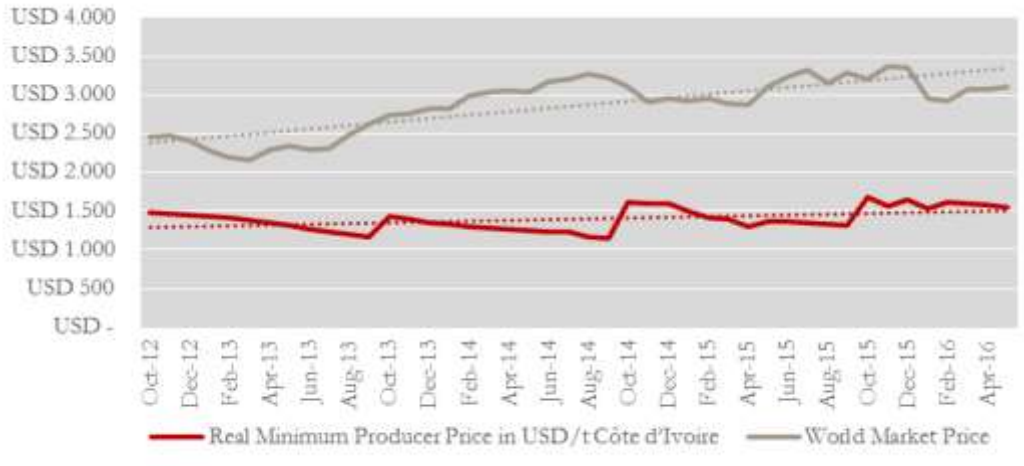
Figure A.16 shows that the nominal farm-gate price has increased over the past five years. Figure A.17 shows a strong negative effect of inflation on the farm-gate price. Since the CFA franc used in Côte d'Ivoire is pegged to the relatively stable euro, the decrease in the real producer price in dollars is mainly caused by inflation. Because of this, the share of the world cocoa price received by farmers went down by 12 percentage points over the last 5 years, from circa 65 percent in 2010 to 53 percent in 2015 (Figure A.17).

Figure A. 16 Farm-gate price of cocoa per tonne in CFA Franc (XOF)



Source: Le Conseil du Café-Cacao (2013; 2014; 2015) Bloomberg (2013), IRIN (2012)

Figure A. 17 Farm-gate price of cocoa per tonne corrected for inflation in USD



Source: Le Conseil du Café-Cacao (2013; 2014; 2015), Bloomberg (2013), IRIN (2012), Institut National de la Statistique (2016), Oanda (2016)

Conclusions Côte d'Ivoire

Since the new set of reforms in Côte d'Ivoire, the sector is completely regulated in terms of prices. With the introduction of a minimum price, prices have stabilised and the farm-gate price increased. However, corrected for inflation, the benefits for farmers are marginal. Comparing to the increase in world market prices, it is concluded that the position of the farmers deteriorated considerably since the new reforms. There is some anecdotal evidence that more remote farmers now receive a substantially higher share of world market prices than under the previous liberalised system.

Although there are many cooperatives in operation, the majority of them is weak. Cooperatives have shown to have little bargaining power. As a country, they have tried to influence prices (e.g. during the first cocoa war) but they have not been successful in putting this forward.

In Côte d'Ivoire, the taxes for cocoa have been constantly high. It is not clear how those high taxes are used and how that translates in benefits for farmers. There are indications that, just like in the early days, there is an elite that benefits from the reforms more than the farmers (Interviews with representatives of chocolate industry during WCC 2016). This is also illustrated by the way the CCC allocates export-licenses to local entrepreneurs (often influential friends and relatives).

The bulk of the trade (and processing) is still in the hands of the private sector and is highly concentrated. In 2013, five multinationals owned 86% of the processing capacity, while 80% of the volume of exports was also controlled by a handful of multinationals.

In Côte d'Ivoire, international companies invest in establishing trade relations with cooperatives. Most companies have their individual programmes but they also participate in PPPs and more coordinated efforts like CocoaAction. Together they support hundreds of thousands of cocoa

farmers with training, access to inputs and investments in community development. The potential impact of these programmes has not yet been documented.

A.5 Indonesia

Table A. 9 Fact sheet Indonesia

Fact sheet Indonesia[21]	
Number of farmers	400,000
Member of cooperatives	10%
Member of farmer group (to access subsidised inputs)	60-70%
Number of local collectors	9,000
Number of local traders	1,000
Number of processors	19
Quantity of beans processed (processed cocoa/tonnes)	700,000
Quantity produced (beans/tonnes) (forecast 2015/2016)	370,000
World Price (EUR/tonne)	2880
Percentage of world price to farmers	80
Percentage of world price to processors	?
Percentage export tax for unprocessed cocoa	10
ICCO price (nominal US$/tonne) (2003/2004)	1534
Percentage of ICCO price paid to farmers (2003/2004)	71
Average farm size (ha)	1
Average yield farmer (kg/ha)	600
Household size	5
Market organisation	Liberalised with export tax on unprocessed cocoa beans

Source: VECO (2011), Fieldwork Indonesia (2016), Interview multinational chocolate manufacturer (2016); ICCO.

Indonesian production chain

Within the Indonesian cocoa chain[22], several marketing channels can be discerned:

- Some farmers sell their wet cocoa beans directly to a processing company. The farmers are offered loans in order to allow them to invest, which encourages them to stay loyal to the particular company (Rifin, 2015).
- Another channel is through cooperatives, where farmers collectively sell their beans (either dry or wet)[23]. These beans are sold to yet another processing company, which has a formal contract with the cooperatives. Through this channel, farmers receive payments with a delay of 2 to 3 months since payments are transferred after a certain amount of cocoa has been received by the buyer. The price received per kg is, however, higher than in the former channel (Rifin, 2015). The higher price is likely not to be the result of negotiation, rather it

21 A problem with data collection in Indonesia is that there are only limited data available and available data are not being shared. This explains why there are large variations in available data, particularly around volumes of cocoa production. For cocoa production, we use the forecast for 2015/2016 (Quarterly Bulletin of cocoa statistics).

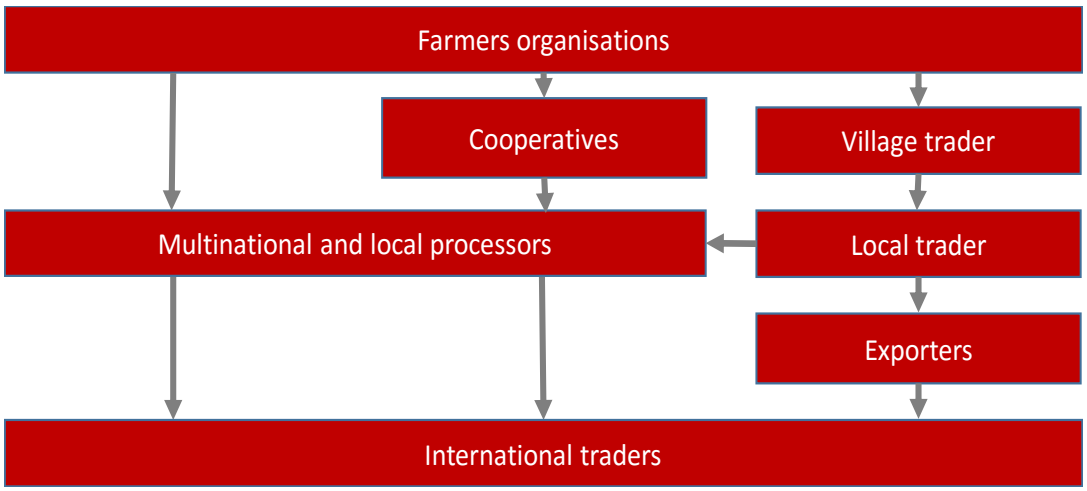
22 Rifin (2015) looks at cocoa production in South Sulawesi, which is the central production area of Indonesian cocoa.

23 Some cooperatives sell only dry beans, others sell them wet. Drying and fermenting can happen on the cooperative level, or on the farm level (Fieldwork Indonesia, 2016).

reflects quality differences or aggregation of larger volumes. Note that higher prices can go hand-in-hand with higher costs, and do not automatically benefit farmers.

- Farmers can also sell their wet beans to village traders, who sell them to sub-regency traders and who sell them, in turn, to processors or exporters. This way of marketing cocoa generates faster income, since payments are made immediately. However, in practice this generates the lowest price per kg of all three marketing channels. Farmers who market their cocoa via cooperatives often sell their cocoa also through this channel in case they are in need of quick cash (Yasa, 2007; Rifin, 2015). All, or at least most, cocoa is processed within Indonesia.

Figure A. 18 Farmers can market their cocoa through three channels



Source: Yasa, (2007), Rifin (2015), Fieldwork Indonesia (2016)

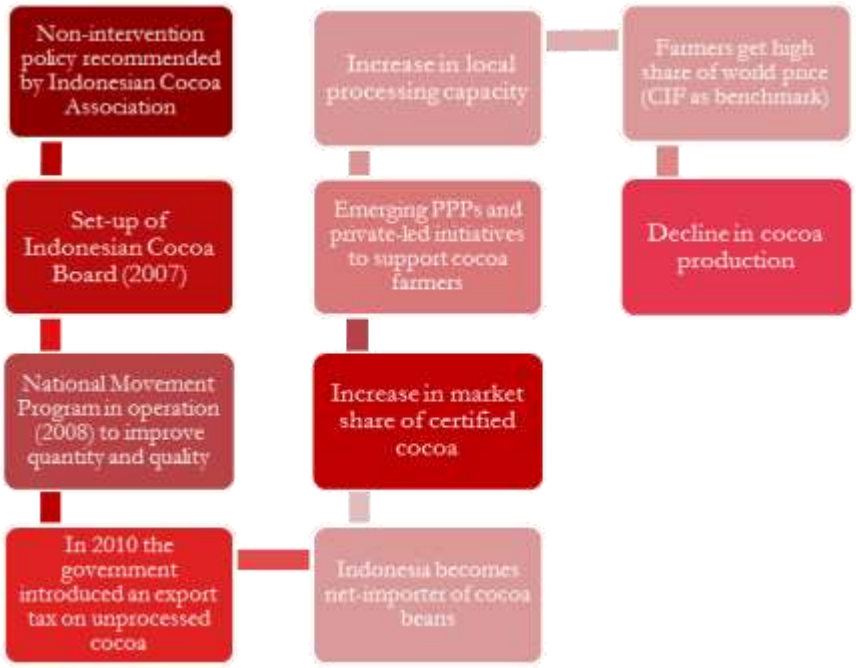
Market developments

Indonesia is known for its highly competitive "hands-off" system. In 2007, the Indonesian Cocoa Board (ICB) was founded by the Indonesian Cocoa Association, Indonesian Cocoa Industry and Chocolate Association, Indonesian Cocoa Farmers Association, Indonesian Cocoa Industry Association, and Indonesian Coffee and Cocoa Research Institute (ICCRI). The Indonesian Cocoa Association recommended a non-intervention policy, which stimulated a rapid expansion of output.

Since the recent imposition of a value added export tax on unprocessed cocoa beans, the government intervention increased to a certain extent.

Since 2008, a National Movement Program (Program Gerakan Nasional Kakao) has become operational. The objective of this programme is to improve productivity and quality of Indonesian cocoa and to increase farmer's income. Fieldwork suggests that the Indonesian government is not actively involved.

Figure A. 19 Regulation and market development in Ghana



Source: Laven (2010)

In Indonesia cocoa production has declined significantly over the last 8 years. There are several estimates from chocolate industry and NGOs that indicate a reduction of around 40%. Production declined from around 600,000 tonnes (2007/2008) to around 370,000 tonnes (forecast 2015/2016). There are various explanations for this development:

- Production costs are high
- High incidence of pests and diseases
- Farmers have alternatives for cocoa production
- The product life cycle of cocoa

So, part of the explanation is that farmers moved out of cocoa production. This exit is stimulated by the low quality of cocoa beans and a lack of opportunities to add value through quality cocoa production.

The market share of certified cocoa is said to have doubled from 3 percent in 2009 to 6 percent in 2010. It is expected that demand for certified cocoa will continue to grow (ICCO 2012).

While the production of cocoa beans almost halved, the domestic processing capacity has more than doubled over the past 5 years. This has been the intentional result of an export tax on unprocessed cocoa that had the objective to promote the domestic capacity of cocoa processing and chocolate production. In June 2014, this tax on cocoa bean export was 10%[24].

A result of the current over-capacity in processing, the domestic demand for cocoa beans has increased (Wahyudi et al. 2008; Fieldwork Indonesia, 2016), although there is also competition. The Indonesian beans 'compete' with imported beans, which are generally of higher quality.

[24] http://www.gbgindonesia.com/en/agriculture/article/2014/indonesia_s_booming_cocoa_industry_puts_farmers_to_the_test.php (12-09-2016)

Imports have tripled since 2012/2013, reaching 110,000 tonnes in 2013/2014 (Fieldwork Indonesia 2016)[25]. In the 2014/15 cocoa year, Indonesia became a net importer of cocoa beans, as imports amounted to 86,700 tonnes while exports declined to 44,200 tonnes.

Table A. 10 Cocoa exports and imports (tonnes) [26]

Cocoa year	2010/2011	2011/2012	2012/2013	2013/2014
Exports of cocoa beans	275,184	183,813	173,605	-
Imports of cocoa beans	19,546	21,515	29,512	110,000
Exports of cocoa butter	64,342	100,791	87,203	-
Exports of cocoa powder and cake	69,276	98,668	81,487	-
Exports of cocoa paste/liquor	11,581	8,754	17,081	-

Source: Adapted from Global Business Guide Indonesia, International Cocoa Organisation (ICCO) Quarterly bulletin, updated February 2016, complemented with fieldwork data.

Price mechanisms

There is no public pricing mechanism in Indonesia. Prices are set by the market and farmers are price takers.

The benchmark used to determine local prices is different from the benchmark in West-Africa. Because Indonesia is importing cocoa beans, as local demand is higher than local supply, the benchmark used by cocoa processing companies is not the FoB price but the CIF price of the imported cocoa beans.

According to a representative of a multinational chocolate company, processors determine farm-gate prices on a daily basis, using the import price as a benchmark; "for example, if the import price for Ivorian cocoa beans is 2400, then processors are willing to pay 2390$/tonne". The reason that processors prefer Indonesian beans is that this is 'easiest' for them.

Cocoa that is sold directly to processing companies fetches higher prices than when sold to village traders. In Indonesia it is estimated that the farm-gate price is around 80% of the FoB. The remaining 20% is partly for taxes (around 10%) and partly for trading costs (the remaining 10%).

According to Neilson et al. (2013) and Rifin (2015) the export tax decreased margins for exporters and drove middlemen from the cocoa chain. The taxation has not lowered prices for farmers, on the contrary, it has contributed to an increase in prices as a result of the CIF benchmark.

Certified cocoa gets a premium price on top of the farm-gate price. This premium goes partly to the cooperatives (or involved FO) (about 30% in the case of Amanah) to pay for the cooperative's operational costs. The rest is paid to the farmers – to cover certification requirement costs – and as an incentive to produce certified cocoa.

25 ibid
26 ibid

Market concentration

In Indonesia, around 80% of the cocoa is grown in Sulawesi by smallholder farmers. Sumatra is the island with the second largest production with around 10% of production taking place there. The remainder of the cocoa production takes place in other regions (Fieldwork Indonesia, 2016). About 10% of the farmers are a member of a cooperative. Around 60-70% of the cocoa farmers are members of a farmers organisation (farmer group). This high membership can be explained by the fact that membership of such an FO is a requirement for accessing subsidised inputs.

Much of the cocoa is sold to domestic processing and chocolate production companies, which have increased their operations (see table A.105). The number of companies operating in the processing/producing link of the chain has increased from 15 to 19 (Fieldwork Indonesia, 2016).

Table A. 11 Number of processing and production plants

	2010	2011	2012	2013	2014
No. of companies	15	16	16	18	19
No. workers	4,000	4,300	4,300	5,300	5,800
Investment (billion IDR)	1,500	2,000	3,000	4,200	4,500
Processing capacity (tonnes)	345,000	560,000	580,000	735,000	765,000
Production[27] capacity (tonnes)	150,000	250,000	306,000	408,000	425,000
Utilisation (%)	43.5	44.6	52.8	55.5	55.6

Source: Fieldwork Indonesia (2016)

Processors in Indonesia are a mix of local and international companies: Cargill, Petra Food (recently taken over by Barry Callebaut) and local processors. According to a representative of a large chocolate manufacturer, Cargill and Barry Callebaut have the largest factories; together they control between one third and half of the processing capacity.

In Indonesia, chocolate manufacturers are investing heavily in sustainability programs, like Mondelēz, Mars, Nestlé. This is often done in PPPs, involving international companies that source and process locally (e.g. OLAM) and NGOs, like Swiss Contact and Indonesian partners, like VECO Indonesia.

Negotiation

Like in other cocoa producing countries, cocoa farmers are price takers. As price-takers they receive a high share of the CIF price.

Farmers that sell individually have no room for negotiation. Cocoa sold through village collectors and traders results in a lower farm-gate price; farmers have hardly any bargaining power and there are many middlemen in this channel. Furthermore, when beans are sold via this channel, they are often not processed before they are exported, resulting in an export tax.

[27] Production capacity here refers to the capacity to produce chocolate and not to the capacity to produce cocoa beans.

Fieldwork indicates that buyers try to secure their supply by offering loans to farmers in the form of money, fertilisers and rice. These loans are repaid in cocoa during the peak harvest season. This relation is mutually enforcing: farmers have access to credit and local buyers have a stable supply of cocoa (Fieldwork Indonesia, 2016). A potential risk is that farmers become locked into a captive relationship where they have few options available to switch to other buyers.

Membership of cooperatives and/or trade through cooperatives potentially leads to higher prices when the beans are used for domestic processing. Higher prices can also reflect higher quality and can result in the aggregation of considerable volumes of cocoa. In the latter case, the price paid to farmers is not necessarily higher as the operational costs for collective marketing needs to be deducted. Most farmers associated with a cooperative also receive a premium since their cocoa is often certified[28]. However, also non-certified cocoa can be sold through cooperatives, although it seems to happen on a smaller scale (Fieldwork Indonesia, 2016).

It can be concluded that there is little room for negotiation. What hinders negotiation is the lack of well-functioning cooperatives.

Farm-gate price

Figure A.20 describes the development of the farm-gate price in Indonesia as percentage of the world market price. More recent data are not available. Nominal farm-gate prices from other sources indicate that the price fluctuates strongly.

Figure A. 20 Farm-gate prices in Indonesia as a percentage of the world market price

Source ICCO

[28] Amanah cooperative sells cocoa with Rainforest Alliance and UTZ certification. Masagena cooperative also sells cocoa with RA certification.

Conclusions Indonesia

Indonesia used to promote a 'hands-off system' without a public pricing mechanism and relatively high prices for cocoa farmers. The introduction of the government tax on exports of cocoa beans had quite some impact on the role of the private sector. The export tax decreased margins for exporters and drove middlemen from the cocoa chain. Moreover, it gave a boost to the local processing capacity, with a large over-capacity as a result. Very recently Indonesia became a net cocoa-importing country.

This explains why taxation has not lowered prices for farmers, on the contrary, it has contributed to an increase in prices as processors now use the prices of the imported beans as benchmark.

Fieldwork and statistics indicate that, despite the relatively high prices for cocoa farmers, and the investments that are being done through PPPs in sustainable production, cocoa production has dropped considerably and quite some farmers are opting out of cocoa. Explanations for this decline in cocoa production are the high production costs, high incidence of pests and diseases, the cocoa life cycle and farmers' higher 'reservation income', meaning that in Indonesia quite some farmers have alternatives for cocoa. This, in turn, is related to a more developed institutional environment (better infrastructure, education, financial sector, business climate). As a result, farmers have more opportunities to exit from cocoa farming when incentives are too low to make the necessary investments in cocoa production.

The farmers that have remained in cocoa, are likely medium sized farmers depending highly on cocoa. This group seems willing to invest in cocoa in the future.

Although the prices in Indonesia are high, farmers are still considered to be price-takers. Collective marketing provides some room for negotiation but does not automatically benefit farmers as the costs involved for aggregation are also high. Farmer cooperatives in Indonesia are only few, and they are generally weak. Farmers organisations (farmer groups) are many as they have been set up to access inputs. These informal groups do not have any bargaining power.

List of respondents[29]

Country	Actor
CAMEROON	Exporter
	Farmer organisation
	Farmer organisation
	Confederation of Farmers
	Exporter
	Exporter
	Public institution
	Local intermediary trader
	Public institution
	Status
NIGERIA	Farmer Organization
	Farmer Organization
	Government
	Government
	Farmers
	Input dealer
	Input dealer
	Consultant
	International organisation/PPP
	Technical partner
	NGO
	Buyer/exporter
	Processor/exporter
GHANA	LBC/Exporter
	Farmer organization/LBC
	Government
	PPP
	NGO
	Certification Scheme
	NGO/Research/Private sector
INDONESIA	PPP Sustainable Cocoa
	NGO
	NGO
	Cooperative
	Cooperative
	Public Private Partnership
	Researcher
	Government
CÔTE D'IVOIRE	PPP
	Buyer/processor
	Buyer
	NGO
	Exporter

29 The list of respondents is anonymized.

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