

DISCUSSION PAPER 6/2017

The Cocoa Conundrum

Transforming the cocoa sector in Ghana to reap its full potential

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Strengthening Africa's
economic performance



Executive Summary

Until the late 1990s, the cocoa sector in Côte d'Ivoire resembled that of Ghana, with a state marketing board which fixed prices and controlled purchase and sale. Liberalisation of the market was triggered by a price collapse, and is largely viewed as a failure in the country. In 2012, a further reform introduced a hybrid system in which the price is controlled, but traders interact directly with farmers.

This hybrid system has been considered a success due to drastically improved yields and quality. However, a recent decrease in the world cocoa price due to oversupply has created a crisis in both the Ivoirian and Ghanaian cocoa sectors.

It appears that global supply has peaked too early, but that demand will steadily increase to match and exceed it. In this event, the 'crisis' should be temporary.

Yields in Ghana have been falling for several years, and local processing remains below that of other producer countries. The potential of the sector to create jobs and uplift people from poverty has not been realised. Nevertheless, increasing local processing and manufacturing of cocoa is the best way to protect Ghana from commodity price fluctuations in the future.

While full liberalisation is neither politically, nor practically feasible in Ghana in the short term, a progressive reform process emulating and extending beyond that of Côte d'Ivoire would increase efficiency, stimulate local growth and incentivise private sector involvement.

A policy brief based on research conducted in Ghana from 6 to 22 February 2017 and Côte d'Ivoire from 26 to 30 March 2017, including consultations with government representatives, industry leaders, independent experts, civil society organisations, intergovernmental bodies, farmers and farming cooperatives.

Introduction

Literally translated, the Latin term for cocoa – *Theobroma* – means ‘food of the gods’. Indeed, cocoa (or cacao, as it is commonly known in raw form) has assumed a god-like quality in Ghana and Côte d'Ivoire, with the power to dictate the lives of almost two million farmers and make or break national economies. Nonetheless, despite together supplying over two-thirds of the world's cocoa beans, neither country has yet succeeded in converting its abundance of the crop into prosperity for its people. Farmers live in poverty, earning a miniscule proportion – as low as 3 per cent – of the retail value of a chocolate bar, as Figure 1 shows. Commodity price fluctuations on the world market present a serious risk to government revenues, as most processing and value addition occurs in Europe and the United States. Although cocoa has

been grown in West Africa for over 100 years, local chocolate industries are weak or non-existent.

Against this troubling backdrop, what can Ghana do to reap the full benefit of this unique resource? What steps can the government take to improve farmer livelihoods, protect against price instability, build local manufacturing and create dignified jobs? This discussion paper argues that a series of bold, yet careful, interventions in the cocoa sector could achieve these outcomes, and provide a significant boost to the national economy. Key to this effort is a clear diagnosis of the impediments to growth and a creative set of solutions to tackle them. To that end, the first section of this paper describes the effect of recent reforms on the Ivoirian cocoa sector, while a second section turns to the situation in Ghana. A third and final section charts a path forward, taking into account what Ghana might learn from the experience of its neighbour.

Figure 1: Percentage share of value in the chocolate supply chain



The evolution and structure of the cocoa sector in Côte d'Ivoire

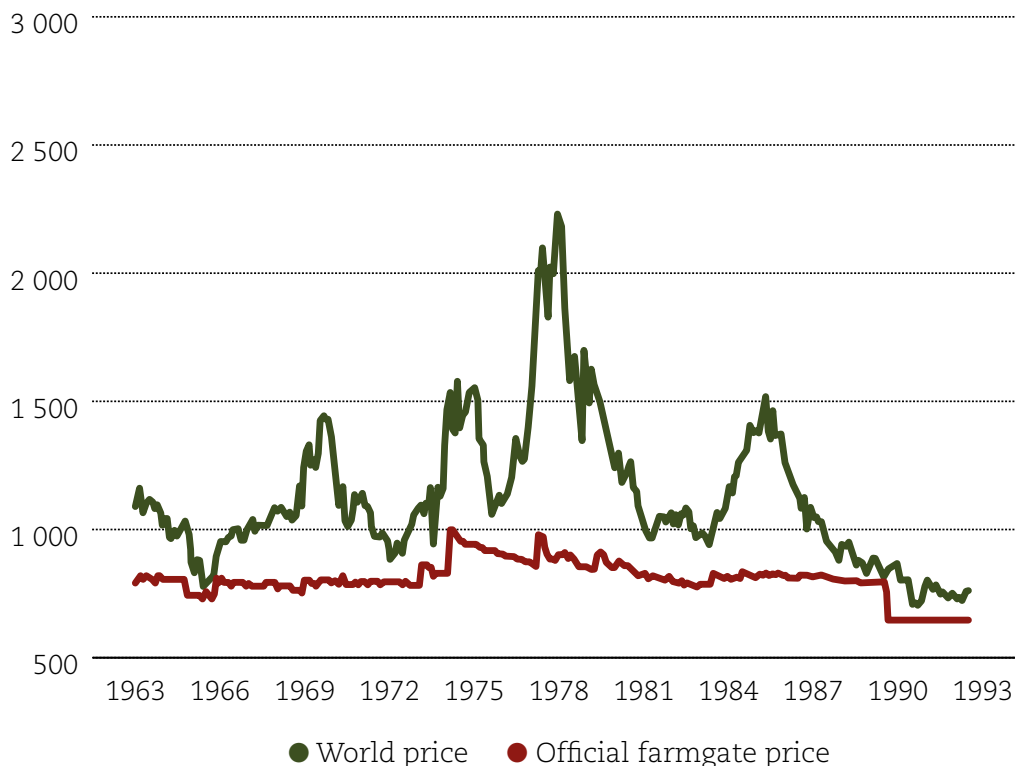
Until the late 1990s, the cocoa sector in Côte d'Ivoire was managed by a state marketing board, the *Caisse de Stabilisation et de Soutien des Prix des Productions Agricoles* (CSSPPA or 'Caisstab'). The Caisstab set a fixed producer price for dried cocoa beans, and bought produce directly from farmers before selling it to large exporting companies. The same system existed in the coffee sector. The state marketing boards set the fixed farmgate price at a significantly lower level than the world market price as a mechanism of taxation, so that in the 1980s as much as 40 per cent of total government revenue came from cocoa and coffee stabilisation funds.

However, the dramatic collapse of commodity prices in the late 1980s, combined with the appreciation of the franc (to which the local currency was tied) in relation to the dollar, served to transform what had been a form of taxation into an

effective subsidy. By 1989 the world cocoa price had dropped below the farmgate price, and the state was spending its existing reserves to compensate farmers for the difference. With a potential debt crisis looming, the Caisstab was forced to cut the farmgate price for the first time in almost three decades, from 400 CFA to 250 CFA per kilogram. A further cut was introduced one year later, reducing the price to just 200 CFA. Figure 2 shows the difference between world price and farmgate price from 1963 to 1993 to illustrate this sharp change in direction.

The crisis which resulted from the commodity price crash triggered a debate about structural reform of the sector. In the late 1990s, under pressure from the IMF and the World Bank, the government decided to liberalise the market. The Caisstab was dissolved and replaced by numerous private bodies which released daily 'indicative prices' based on the market price in New York and London. Traders (or 'traiteurs') bought cocoa directly from farmers, and sold it on to exporters at a margin. Farmers and cooperatives were free to negotiate the price of their goods on an ongoing basis, in the absence of an enforced minimum.

Figure 2: World and farmgate prices for cocoa in Côte d'Ivoire, 1963 to 1993



This period of liberalisation is widely regarded as a failure within Côte d'Ivoire, and led to severe dissatisfaction amongst farmers. According to an official at the World Cocoa Foundation, who worked in the industry at the time, this was because farmers 'were not ready or equipped' to interact directly with buyers on their own, and were often exploited as a result. Cocoa has historically been produced by hundreds of thousands of smallholder farmers operating independently (with an average of two to three hectares of land), and the absence of adequate information or coordination left them vulnerable to powerful buying companies. Farmgate prices remained well below the world price, and farmers complained that traders were extracting even larger margins than the Caisstab had before. A race to the bottom led to farmers undercutting one another rather than cooperating to sell at a fair price.

In 2012, with the end of the post-election crisis and the formation of a government by President Alassane Ouattara, the World Bank and IMF insisted on a further reform of the cocoa sector as part of a large debt alleviation package. Consequently, a new state entity – *Le Conseil du Café-Cacao* (CCC) – was created to regulate the market. Like its predecessor, the CCC sets a fixed minimum farmgate price for dried beans in advance of each annual harvest. Under this system, farmers must receive at least 60 per cent of the total CIF price (cost, insurance and freight).

Unlike the Caisstab, however, the CCC does not physically purchase beans from farmers itself. Rather, export rights are sold at daily online auctions for the following year's harvest. Based on the bids received, these rights are allocated by the CCC to exporting companies. Exporters then purchase the amount of beans to which they have secured rights directly from farmers and cooperatives, at the fixed price – and declare their purchases to the CCC. In this hybrid system, the state marketing board controls the price and grants authority to traders, but does not actually procure cocoa itself. The revamped CCC also allows farmers and cooperatives to purchase inputs from private suppliers, and no longer controls the distribution of planting materials, fertilisers and pesticides. The private

sector is therefore directly involved both in supply to farmers, and in purchase from farmers.

According to one source at the World Bank, who helped to engineer the latest reform, the CCC was intended to be a temporary 'transition stage' rather than a permanent structure. The idea was to allow for a period of five to ten years during which farmer cooperatives could be strengthened and supported, to eventually allow for a 'managed liberalisation' once they were ready to stand on their own. However, in recent years the government has appeared to consider the CCC as a permanent solution, and has stopped hinting at future changes.

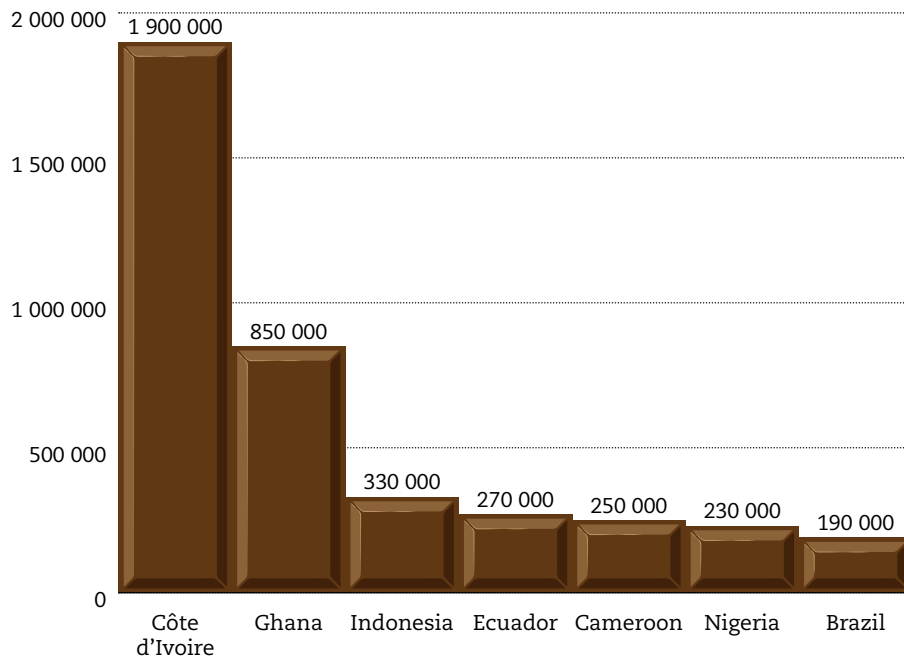
Bold reform in Côte d'Ivoire since 2011 has revolutionised the cocoa sector, drawing lessons from years of experimentation. Farmer cooperatives are stronger, inputs are more readily available, and yields have exploded as a result. As always, though, challenges remain.

Successes and challenges

Under the reformed system, yields increased dramatically between 2012 and the most recent harvest in 2016, which produced over 1.8 million tonnes (an overall increase of 600 000 tonnes, or one-third). There are various reasons for this, including investment in better inputs and farming practices by large cocoa companies who are able to choose their suppliers and support them directly; the ability of these farmers to procure high-quality and appropriate inputs from private suppliers; and programmes run by the CCC to replace old trees and combat diseases like swollen shoot virus. As a result, Côte d'Ivoire has far outpaced other producing countries, securing its place as the world's largest producer – as Figure 3 below demonstrates.

While this increase in yield was initially celebrated, many now argue that it has had unintended negative consequences for farmers. Since the beginning of 2017, the cocoa price – which had been steadily increasing – has begun to fall, due to a global oversupply of the commodity and a slower-than-expected growth in demand.

The effect of the oversupply, and the fall in the world price, has been severe. Several hundred

Figure 3: Cocoa production by country (Africa)

Source: ICCO

thousand tonnes of dried beans were reportedly stuck in trucks and warehouses or left in storage on farms in March and April 2017, as smaller exporters reneged on contracts to purchase them. Larger buyers who are hedged on the London and New York stock exchanges – having sold contracts on the cocoa futures market in advance of the price collapse – have not been equally affected. But many local traders who are unhedged face the prospect of being forced to buy cocoa at a higher fixed price than they are able to secure on the world market, and have therefore stalled their operations. As a result, the CCC eventually succumbed to industry pressure and dropped the farmgate price from 1 100 CFA to 700 CFA per kilogram, a decrease of 36 per cent.

This sudden drop in prices will have serious repercussions for farmers. One farmer near the town of Afféry in the south-eastern region, says that he will have to borrow money in order to feed his family and afford school fees. 'Cocoa is the most important product in the country, and we are the ones who produce it. But we will suffer', he says. The manager of a cooperative in the

same region points out that one perverse consequence of the fixed price is that farmers take it for granted, and plan accordingly. 'Before, during the period of liberalisation, farmers would save or invest because they knew that the price might fall in the next harvest. They would buy large bags of rice and store them in case of a bad year. Now, they expect the price to stay at 1 100 CFA forever, and they have been spending more recklessly.'

While the crisis has elicited strong reactions from farmers and cooperatives, who have demanded that the government maintain the price through subsidies, others believe that it will be short-lived. An agronomist at the Nestlé Research Center insists that in the long term, demand will increase to end the oversupply. In his view, while growth in supply has temporarily outstripped growth in demand, the latter will slowly catch up and eventually exceed current supply even at its highest levels: 'The risk is that farmers who are short-sighted will abandon cocoa for other crops now, when the price is low, and then in three or four years we will have a huge undersupply and miss the opportunity.'

The cocoa sector in Ghana: a story of missed opportunities

Cocoa is equally important to the Ghanaian economy, accounting for almost 10 per cent of the country’s GDP and 20 to 25 per cent of total export earnings. Yet Ghana has been slower to adapt to a changing global economy, or to seize the opportunities it presents.

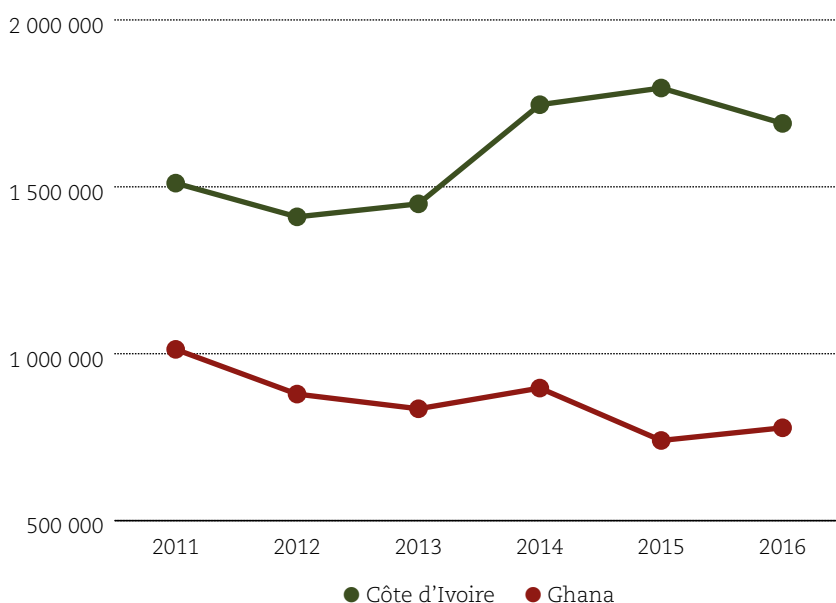
The cocoa marketing system in Ghana resembles that of Côte d’Ivoire prior to the 1990s, with a central state body which procures and distributes farming inputs, sets a fixed price, retains a monopoly on purchase from farmers (through licensed buying companies acting as agents) and sells cocoa on to exporters. Figure 4 illustrates this structure visually.

This has led to declining yields and quality in recent years, as inputs are regularly delivered in the wrong type or quantity or at the wrong time (if at all). As Yao Pokou of the Hans Neumann Stiftung notes, ‘there is no point giving Mercedes saplings to a farmer who doesn’t have pesticides, or fertilisers, or the training that he needs’. Despite the fact that Ghana and Côte d’Ivoire have roughly an equal number of farmers with the same average farm size, Ghana produces significantly lower output. Total production increased from 400 000 metric tons in 2000 to 1 000 000 metric tons in 2012, then dropped to 850 000 metric tons in 2014 and has fluctuated between 750 000 and 850 000 metric tons annually since then, as Figure 5 shows. With no incentive for investment in farms by the private sector – as companies cannot choose the origin of the beans they purchase, or build

Figure 4: The Ghanaian cocoa marketing system



Figure 5: Cocoa production in Ghana and Côte d’Ivoire 2011–2016



Source: COCOBOD/CCC

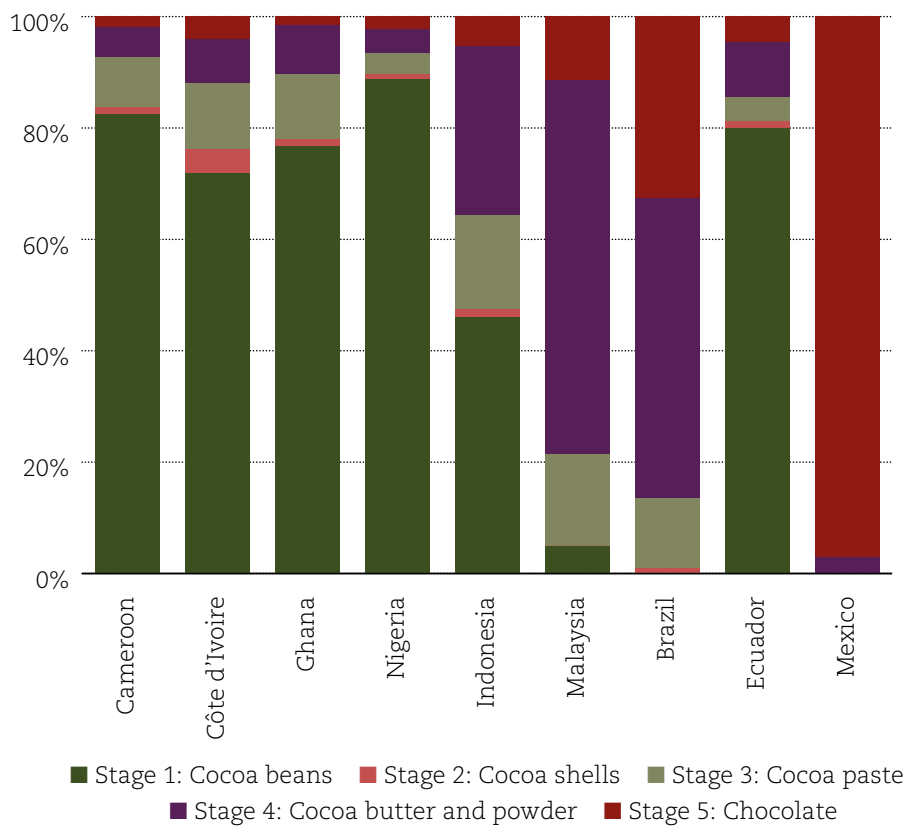
relationships directly with farmers – trees are ageing and becoming diseased without replacement. Massive corruption and mismanagement have historically been an additional cost to the system. As a result, should demand increase and prices recover in the medium-term, Ghana will be left behind and could miss out on a future commodity boom.

Over and above the problem of yields, Ghana lags behind other producer countries in the development of local processing and manufacturing industries. The significant majority of value in the cocoa industry lies in processed products and consumer goods, rather than raw cocoa beans. The global cocoa bean market is worth an estimated \$9 billion, compared to an intermediate product market of \$28 billion and a final consumer goods market of \$87 billion. At present, Ghana captures just over 20 per cent of the cocoa bean market and only a minute share of the intermediate and final products market. While the export of raw beans

has been an indispensable source of government revenue since independence in 1957, the enormous potential of value-added products remains largely untapped. Ghana processes just 15 per cent of the beans it produces, and most of this capacity is limited to initial-stage processed goods (such as cocoa butter and powder) rather than final-stage consumer products. Figure 6 visually illustrates the value-added content of cocoa exports from Ghana in comparison with other producer countries in Africa and elsewhere.

The failure to advance down the value chain is in part due to the historical structure of the cocoa industry, entrenched during colonial rule. For over a century, raw cocoa beans have been exported from West Africa to industrial processors in the Netherlands, Belgium and other European countries where they are transformed into chocolate products. These industries are highly advanced, and require skills that have not been fully developed in producer countries. Moreover, because

Figure 6: Value-added content of cocoa exports of selected developing countries (2011)



Source: CABRI



Cocoa pods ripening before the main harvest.



A farmer demonstrates the harvesting and fermentation process in Nsawum, near Accra in Ghana.



Cocoa farmers in a village near the town of Afféry in Côte d'Ivoire.

chocolate is a luxury good, perceptions of quality are linked to production origin – chocolate produced in Switzerland, for example, is viewed as being of superior quality than that produced elsewhere. For these reasons, nascent chocolate industries in producer countries have faced high barriers to entry.

Nonetheless, little has been done in recent decades to actively promote the development of processing capacity in Ghana, which has fallen behind almost every other producer country in this regard (including Côte d'Ivoire). Numerous policy documents identify the enhancement of cocoa processing as a stated government objective: the 1984 Ghana Cocoa Board Act lists '[encouraging] the establishment of industrial processing factories for the processing of cocoa' as one of 12 key objectives; the 1999 Cocoa Development Strategy names it amongst 11 focus areas; and the 2011 Industrial Policy highlights it as a major component of future agroindustry. According to recent public statements by COCOBOD, the government has set a target of processing 50 per cent of beans locally. Despite these commitments, however, past and current policy measures have either failed to promote local processing or have in fact obstructed its growth.

At present, beans from the main crop (grown between October and June) are sold to local buyers at the full market rate, while beans from the light

crop (grown in July and August) are sold at a 20 per cent discount. This incentive, although appealing at face value, is largely ineffective. In recent years, the light crop has comprised between 8 per cent and 10 per cent of total output, with beans of a smaller size and lower quality than those of the main crop. This means that the available discounted beans are not enough to sustain local processing operations, and are, anyway, of a lower quality than those sold to exporters. Many existing plants are currently operating at less than half of full capacity, or are forced to import beans from Côte d'Ivoire.

Existing impediments to local production – including expensive power and a relative lack of technical skills – raise the costs of doing business in Ghana. In order to promote local processing, then, incentives are needed to counterbalance these costs and entice multinational companies to shift some of their operations while supporting the rise of local entrepreneurs.

The story of 57 Chocolates, an artisanal chocolate manufacturer based in Accra, reveals the challenges facing the local industry. 57 Chocolates was started in 2014 by two sisters who had recently returned from their studies in the United States. With their own capital, they visited chocolatiers in Europe to learn the trade and purchased the basic equipment for a chocolate workshop. Their goal was 'to prove that we can make quality



A team of researchers from the Brenthurst Foundation speaks to a farmer in Nsawum, near Accra in Ghana.



A farmer and his grandson stand beside the cocoa bean drying rack near their home.

goods at home', and their first batch was produced in 2016. While the business has slowly expanded, it has experienced significant challenges. One of the founders describes the hurdles they have faced, including the difficulty of registering a business and the cost and instability of power (crucial for such a hot environment, where the AC must run continuously). Most importantly, the highly-centralised system makes it nearly impossible for local producers to source cocoa supplies, as almost all the country's harvest is channeled to exports or larger local companies and it is impossible to purchase cocoa directly from farmers.

A clear contrast exists in this regard between Ghana and Côte d'Ivoire. The latter has already managed to increase local processing to 40 per cent of total output, and aims to reach 50 per cent by 2020. A senior executive at CEMOI Ltd West Africa, a major French chocolate producer, explains that the environment for local production in Côte d'Ivoire provides greater opportunity than in Ghana. CEMOI has recently built a large processing plant in Abidjan of more than 2 000m², which processes raw cocoa beans into chocolate paste, drinks and bars. This would not have been

possible in Ghana, where local industry receives less support and – most importantly – manufacturers cannot procure beans directly from preferred farmers and cooperatives. A failure to promote and facilitate investment meant that Ghana did not benefit as much as it could have from the Ivorian civil war between 2002 and 2011, which should have provided an opportunity to attract industry to a more stable environment nearby.

Previous governments in Ghana have showed a reluctance to aggressively pursue the local processing of cocoa beans, perhaps because they have viewed cocoa as a financial commodity (and a source of reliable export revenue in the short term) rather than as a basis for industrial growth. While the export of raw materials is an easy way to fill government coffers, however, it will not create much-needed jobs or skills. Ghana has ultimately suffered from a lack of policy creativity, having for decades viewed an unpopular system of full liberalisation as the only alternative to the status quo. As the following section shows, this is not the case – rather, a series of simple, politically feasible reforms is necessary and possible.

A way forward: bold reforms to fulfil Ghana's potential

History shows that Ghana's economic fortunes are tied inextricably to cocoa. When prices drop or yields collapse, the economy suffers; on the converse, when revenues are high and farmers' income rises, the economy strengthens. For the new government elected in December 2016, therefore, revitalising the cocoa industry must be a core priority – indeed, its popular support hinges on it, as does the welfare of its people.

In reviewing cocoa sector policy, two overarching objectives must be kept in mind. The first is to improve farmer livelihoods. As mentioned above, over 800 000 smallholder farmers and their families – as many as 3 million people altogether – depend on cocoa for their survival. Instead of a shackle to poverty, cocoa could be a tool for poverty alleviation and enhanced social mobility. The second objective is to build local processing and manufacturing capacity. It is entirely possible for Ghana to process 50 per cent of its raw cocoa beans locally by 2020, when President Akufo-Addo's first term in office will end. Doing so will

create thousands of new jobs and add value to export products, raising additional revenue for government initiatives. More importantly, it will protect the economy from the adverse consequences of commodity price fluctuations. When the price of raw cocoa decreases, primary producers suffer, as they are forced to sell their product at a lower return. Processors, manufacturers and retailers, however, benefit immediately, as their operating costs decrease and their profit margin widens. If Ghana expanded its local processing capacity, then, the losses incurred from a price collapse could simply be transferred to gains in the secondary sector.

How, then, should the government pursue these two objectives? In this regard, Ghana has three basic policy options to consider:

- Retain the status quo, with COCOBOD acting simultaneously as a regulatory authority, input provider, purchaser and marketer.
- Fully liberalise the cocoa market, allowing farmers to sell directly to traders without a fixed minimum price.
- Implement progressive reforms to encourage private sector involvement, while maintaining a fixed minimum price.



Cocoa beans laid out in the sun to dry.



The office of the COOPEC cooperative, in the town of Afféry in Côte d'Ivoire.

The first option is clearly suboptimal, and has led to annually decreasing yields while suffocating the local private sector. The second option, however, is neither politically nor practically feasible in the short term. Farmers and farmer organisations are opposed to liberalisation because of its perceived failure in Côte d'Ivoire, and because they benefit from the fixed minimum price. COCOBOD is equally opposed to such a reform, because it would lose control of the sector. Reform of this type would be politically costly as a result. It is also likely that farmers in Ghana are not ready for liberalisation, as they operate at a small scale and in a largely uncoordinated manner and would find it difficult to negotiate effectively with powerful traders. Reforms implemented too quickly or too early could lead to failure, and render any future reform efforts politically impossible.

The third option allows for much-needed changes to the system which would lead to significant improvements in the short term, and pave the way for deeper reforms in the longer term. The benefits of targeted reforms would be immediately felt by farmers and by local industry and entrepreneurs, and would therefore represent a clear political victory for the government. At the same time, careful reforms would preserve the core functions of COCOBOD and retain adequate state

protection for vulnerable farmers. A programme of progressive reform would entail eight specific policy changes:

1. Adopt a hybrid marketing system along the lines of the Ivorian model, with a daily online auction of export rights to traders who would purchase cocoa directly from farmers themselves

A hybrid system would allow COCOBOD to determine a fair minimum price based on annual demand and guarantee the advance purchase of each harvest. This price must be flexible per market fluctuation while still protecting farmers from sudden and severe decreases in price. Taxes on cocoa purchases can still be levied, and the revenue stored in the existing stabilisation fund to provide short term temporary relief in case of need. At the same time, allowing traders to purchase cocoa directly from cooperatives would create competition between exporters for contracts with preferred farmers, and between farmers for relationships with large purchasers (who offer benefits such as paid premiums, schools and infrastructure, quality inputs and training). The sale of export rights would in this way retain some level of government control at the

regulatory level, while reducing the monopoly of the state on purchase and minimising the presence of cost-raising middlemen. Crucially, this would make it easier for local processors and manufacturers to procure cocoa directly, helping to facilitate a nascent domestic industry. Additionally, local companies should be allowed to purchase cocoa at the discounted minimum price from farmers themselves, or even to establish their own cocoa farms in order to vertically integrate their operations.

2. **Implement a voucher system for the purchase of inputs such as fertiliser, with vouchers distributed according to the volume of beans produced**

This would allow farmers to purchase necessary inputs from private sector suppliers. Farmers know best what their farms need, and private suppliers can distribute this more efficiently. The purchase of inputs by the state is vulnerable to corruption, as providers seek to secure lucrative contracts through processes that lack transparency or oversight. In January 2017, for example – shortly before the inauguration of the newly elected President – the outgoing COCOBOD executive issued sole-sourced and restricted-tender contracts worth \$512 million. At the same time, the use of subsidies paid to suppliers to reduce product costs does not ensure the adequate use of quality- and yield-enhancing inputs by farmers. A voucher system allows farmers to choose which inputs to purchase from whom, in what quantity and at what time, while guaranteeing that they use vouchers for that purpose. To ensure equitable allocation of vouchers, the value of government support can be tied to the annual tonnage of beans produced by each farmer.

3. **Strengthen farmer cooperatives, and provide incentives for membership**

Estimates suggest that approximately 75 per cent of smallholder cocoa farmers in Ghana are unorganised, compared to just 30 per cent in Côte d'Ivoire. Strengthening cooperatives (as Côte d'Ivoire has successfully done) has many benefits for farmers: members can

assist one another with harvests, negotiate relationships with purchasers, pool funds for emergencies, and buy equipment in bulk. The failure of full liberalisation in Côte d'Ivoire is widely believed to have been caused by a lack of preparedness amongst farmers, who were not able to interact or negotiate with traders on their own to optimise their income. In the absence of commercial-scale farms, farmer professionalisation and the development of cooperatives is the best way to pool farmers' resources and enable them to represent their collective interests. In addition, strong cooperatives would pave the way for a more complete liberalisation in five to ten years, protecting farmers from exploitation.

4. **Reinvest tax revenues from cocoa sale into building of access roads and enhanced export facilities**

COCOBOD could carve a new role for itself as a development authority, improving roads to facilitate market access, which would have the dual effect of improving the connectedness of rural areas to more developed centres. In particular, an expanded warehouse capacity at Takoradi harbour would provide a boost to exports and allow for longer-term storage in case of an oversupply.

5. **Provide a discount on the main crop to local processors and manufacturers**

The existing discount of 20 per cent on the annual light crop is clearly insufficient to make local processors competitive, either in terms of quantity produced or in terms of product quality. A similar discount should be provided on the main crop, on the understanding that the immediate loss in revenue will be accrued further down the line in other forms of taxation and in the generation of skills and employment.

6. **Promote intensification rather than expansion, and support the diversification of crops**

In previous years, efforts to increase yields in both Ghana and Côte d'Ivoire have focused on expanding the size of farms and distributing a greater number of seedlings. While this

has contributed to the remarkable increase in yields in Côte d'Ivoire since 2011, it has resulted in the use of fertile land for cocoa rather than other food and cash crops. When the market price of cocoa beans decreases, farmers who are entirely dependent on cocoa suffer disproportionately. Instead, promoting a strategy of *intensification* of yields – through more advanced seedling varieties like the Mercedes tree, better quality inputs and training – would allow other arable land to be used for coffee, rubber and food crops like cassava. Diversification provides a crucial cushion to farmers, giving them several sources of income and a reliable food source for subsistence. State support can be given to promote diversification, and expansion programs reframed as intensification programs in anticipation of future increases in global demand.

7. Help farmers to secure organic and fair trade certification, and extend production to new bean varieties and flavours

In the event of a global oversupply of cocoa, it is necessary to establish a comparative advantage over other producing countries and to receive a premium on locally produced beans. While Ghanaian beans already receive a small premium on the world market because of their higher relative quality (in terms of the quantity of cocoa butter in the bean), an even greater advantage could be gained by expanding organic and free trade certification for the high-end market and by introducing farmers to new bean varieties and flavours. Most farmers in Ghana currently produce *forastero* beans, which are generally considered to be of inferior flavour and intensity than the *trinitario* and *criollo* varieties grown predominantly in South and Central America.

8. Establish a joint committee at the presidential level to explore cooperation in the cocoa sector between Ghana and Côte d'Ivoire

Finally, as the world's two most important producers of cocoa, cooperation between Ghana and Côte d'Ivoire is essential. There is scope for combined action between the two countries

in terms of (a) yield projections and information sharing, (b) regional trade and processing, and (c) responses to price fluctuations in the world market. A regular and structured interaction between the two governments, outside of the larger and more diverse International Cocoa Organisation, would facilitate enhanced cooperation. Although it is difficult to influence world cocoa prices directly (as raising the price in one country simply encourages exporters to purchase from other producer countries elsewhere in the world), there is nonetheless much to be gained from international cooperation and coordinated planning.

Conclusion

Agriculture is inherently risky, due to the unpredictability both of production output and of world commodity prices. If properly managed, however, these risks can be mitigated. The current system in Ghana is ill-equipped to do so.

Of course, the most obvious way to protect the economy from the effects of a fall in commodity prices is to increase domestic value addition and manufacturing capacity. If Ghana were to produce chocolate and cocoa products locally, then a decrease in the price of raw cocoa would simply increase profits at another stage of the value chain (transferring, rather than losing, money). The consumer price of processed goods rarely drops proportionately to a drop in commodity prices, so that the margin on such goods increases. It is important that local companies should benefit from this. A key benefit of the Ivoirian system is that it allows local manufacturers to procure raw materials directly from producers in a fairly (even if not completely) open market. As a result, local processing of cocoa currently stands at around 35 per cent, compared to just 15 per cent in Ghana. In Côte d'Ivoire, this is expected to rise to 50 per cent by 2020, while the industry in Ghana remains fairly stagnant.

Additionally, the existing system in Ghana offers no incentive for the creation or growth of farmer cooperatives, which have fuelled improvements in quality, output and farmer livelihoods in

Côte d'Ivoire. If there is no opportunity for farmers to interact directly with (or compete for contracts with) large purchasers, then the role of cooperatives is reduced. Conversely, farmers must associate in groups in order to negotiate with large companies and acquire certification of their products. Opening up the system would therefore encourage cooperation of this type, which has many indirect benefits as well.

More broadly, the challenges facing the Ghanaian cocoa sector include falling yields, declining quality, inefficient delivery of inputs, corruption and mismanagement, and a stagnant local processing industry. To tackle these, the structure of the sector must be changed to facilitate (1) the direct purchase of inputs by farmers and (2) the direct purchase of cocoa by traders. Both of these changes can be implemented while retaining a fixed minimum price in the short- to medium-term in order to protect farmers from exploitation.

A hybrid system akin to that of Côte d'Ivoire would allow for these objectives to be met as part of a politically feasible reform process. While it will never be possible to control world commodity prices, it is possible to mitigate the effect of price decreases while ensuring maximum benefit when prices are high. Incentivising the private sector to build relationships with and invest in farmers, allowing farmers to procure appropriate inputs themselves, encouraging the formation of cooperatives, and making it easier for local companies to buy cocoa will go a long way towards achieving these goals.

In implementing a much-needed reform of the cocoa sector in Ghana, one primordial objective must be pursued: improving the lives of the farmers, and their families, upon whom the industry depends. The current system offers these farmers little escape from poverty, despite its ostensible purpose of protecting them. Change is therefore urgently needed.