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Whose cocoa?

Occasional paper1

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Table of contents

Abstract	3
A value chain with different arenas and different agendas	4
On the ground with the cocoa farmers	6
Dearth of data	12
On cooperatives	13
The inter-generational problem of cocoa farming in Ghana	14
Suggested scenario building	16
On prices	18
COCOBOD and the political economy of Ghana's cocoa	21
Put in historical perspective – the peasant and the state	22
Further down the chain	26
Industrial policy at work?	30
Cocoa and EU trade policy	32
Conclusion	35
Selected Bibliography	37

Abstract

After years of multi-stakeholder commitment to sustainable cocoa farming and processing in Ghana, a surprising number of important analytical questions remain unanswered, and developmental and political agendas have not been harmonized among the different arenas in which they are debated. Cocoa farmers do struggle with agro-physical and micro-economic threats to survival. Teaching good agricultural practice is an attempt to respond to their problems but the critical nature of the farmers' economic situation has still not been fully exposed. Relatively low degrees of the cocoa farmers' organisation remain without proper explanation and theory of change. The inter-generational challenge leads us to the prediction of a 'death in the family' for small-scale cocoa farms in Ghana. How the government and its partners can possibly implement other, more desirable scenarios remains without a comprehensive, properly operationalized answer. In particular, the core issues surrounding still too low farm-gate prices remain perfectly opaque. The lack of transparency and bad financial practice of Ghana's COCOBOD pose important institutional questions of "not-good-enough governance" which need to be addressed in targeted policy dialogue, arguably absent until today. Ghana's public and private partners, interested in certification, are manifestly avoiding to talk about some of the basic issues for sustainable cocoa. In contrast, industrial processing of cocoa has made remarkable progress in Ghana, yet the driving factors – market trends, trade agreements or industrial policy – and their respective contributions still require clarification in order to assess the sustainability of the entire value chain in Ghana and neighbouring cocoa-producing countries.

A value chain with different arenas and different agendas

Cocoa farming allows about 800,000 families in Ghana to more or less earn their livelihood. The high number of family farms is out of proportion to the much lower share that cocoa production and marketing has in the country's Gross Domestic Product, which for the last two decades has hovered at 7 percent, a third of the share that agriculture and livestock have in the GDP (around 20 %). Right from the beginning, this indicates that cocoa in Ghana has a massive problem with labour productivity on the farms. Some valued added from cocoa products features as part of the manufacturing industry, yet this industry's total itself amounts to less than 10 percent of the national product, as elsewhere in barely industrialised Sub-Saharan Africa.²

Against this greyish backdrop, agro-industrial value chain support comes in handy, delivered in Ghana as a combined effort by national and international agencies, in tandem with CSR activities by global players in the confectionary industry. Promotion of Ghanaian cocoa production is assumed to benefit from the accumulated knowledge of global value chain analysis. This paper is a contribution to such an analysis – without the quantitative part normally required.³

Global value chain (GVC) promotion operates all along the chain but in practice it often shows an interesting split. Number of GVC projects tend to focus on the beginnings of the chain, the agricultural practices of the farmer, while others try to mount industrial downstream activities in the producer country in question. One is agriculture, the other is industry. The economic imperatives for the two are not always compatible with each other and with fiscal considerations (see the last two sections).

For other crops, GVC promotion focuses on integrating more farmers into export-oriented production, with the aim of securing them access to foreign markets. This part of the task is irrelevant for cocoa. African cocoa farmers do not have to be integrated into the global value chain. They are all integrated, historically by their own initiative, before aid and largely despite the state (see section below). With regard to cocoa in West Africa, the focus is squarely on how to ensure better terms for the raw product – cocoa beans – in the interest of the farmers and the consumers in the global North.

² Ghana along with Nigeria is one of the African countries which recalculated its national accounts some years ago. The rebasing of Ghana's GDP in November 2010 has accentuated the weakness of cocoa growing, marketing and processing, as it was mainly the weight of services in the national accounts that was corrected upwards. The correction of national accounts demonstrated that Ghana, like other African countries, has a *macro*-economic data problem, in addition to which the specific *micro*-economic conundrum of cocoa household and farm data is observed here. The 2010 revision formally lifted Ghana into the ranks of a (lower) middle-income country, depriving it of World Bank IDA concessional lending and creating a trade policy problem with the EU (see last section). It is now a matter of debate whether the statistical upgrading truly reflects the developmental reality on the ground, including what some analysts interpreted after the revision as Ghana and Nigeria's escape from a poverty trap. (Jerven 2013a; 2013b) The analyses of the social situation of Ghanaian cocoa farmers contribute significantly to this debate.

³ The literature on global commodity or value chain analysis is endless. Authors in this field include Gereffi, Kaplinsky, Humphrey, Schmitz, Sturgeon, Bair, Gibbon and Ponte. Handbooks are for example Kaplinsky and Morris (2001); Webber and Labaste (2010). For the work of UN agencies on GVCs see in particular UNIDO (2015).

Therefore, the attention of aid agencies and European or US chocolate companies is centred on various forms and combinations of **certification** for (1) sustainable cocoa at large, (2) Fairtrade, (3) organic cocoa, including firm-specific certificates, along with attempts at traceability of the product. Sustainability encompasses eradication of child labour, deforestation and deprivation of cocoa farmers. At the international level, the agenda is implemented by the long-established International Cocoa Organization (ICCO), the International Cocoa Initiative (ICI) and the World Cocoa Forum (WCF), forums in high-end producers' countries such as Germany's GISCO⁴ or the Swiss Platform for Sustainable Cocoa⁵. Forums at national levels of cocoa growing countries correspond to this setting, although there is no real Ghanaian equivalent and no relevant regional forum at the West African (ECOWAS)⁶ level either. Finally, there is or should be an important third level – the local or regional one, meaning sub-national arenas. Not all talk to each other.⁷

Any explanation of joint concerns and diverging interests has to refer to the actual commercial leaders and this in turn relates to what the literature calls value chain governance. The issue of who the true chain leaders are for cocoa is intricate. Today there are three specialised trading and processing companies -Barry Callebaut, Cargill and Olam, having engulfed Archer, Daniels & Midland (ADM), alongside a few pure commodity traders. The big confectionary/chocolate companies (about five to six) are another category of lead firms, in particular as this chain segment is highly concentrated as well. They also take on corporate responsibility for what happens all along the chain. Hence we encounter a bicephalic governance structure or a "bipolar" one, as Fold (2002) put it earlier – whatever bipolarity indicates here. The three main actors observe a delicate power balance with most of the leading global chocolate makers who also maintain some in-house grinding capacity and origin sourcing. Remarkably, getting to sustainable cocoa production seems to be an aim shared by both groups of lead firms, although one has no face to the final consumer. This is not to disregard the market power of the big retailers selling about 80% of the chocolate bars in their supermarkets which makes the chain, in a proper count, three-headed. As the low price of a bar of chocolate plays a signalling role at shop entry, the supermarket chains have a key role as co-governors of the cocoa chain – economically a price-depressing one, although in CSR terms everything apparently began with UK supermarkets selling their own brand of Fairtrade chocolate. This makes the standard alternative of value chain governance non-applicable: global cocoa is not either a so-called producer-driven or a buyerdriven chain – it is both. Yet it remains unclear to what extent a "disjuncture" between monopsonistic / monopolistic market actors and a fragmented peasantry, as Barrientos stated it 8, influences international

⁴ German Initiative on Sustainable Cocoa (GISCO); cf. https://www.kakaoforum.de/en/

⁵ Cf. https://www.kakaoplattform.ch/en/

⁶ ECOWAS is the acronym of the Economic Community of West African States, an economic and political association of 15 countries, with Mauritania and Morocco willing to join. On economic affairs ECOWAS is an emerging free trade area and customs union, and the natural partner for trade negotiations with the European Union. How cocoa impacts ECOWAS-EU trade relations and vice versa will be addressed at the end.

⁷ The role of EDP is to bring together stakeholders from entirely different spheres at the grassroots level, by exposing and immersing national and international high- or higher-level representatives to the village-level reality, with a concluding return to dialogue in a host country national arena. The present paper draws heavily on the evidence generated by two rounds of such programmes in February 2017 and 2018, respectively. These Exposure and Dialogue Programmes represent a kind of participant observation without claiming too much of the methodological rigour that is warranted in anthropology or sociology.

⁸ See her analysis of cocoa/chocolate company strategies 'Beyond Fair Trade' in Squicciarini and Swinnen (2016: 215, 220)

prices and quantities. The fact that international civil society and donor organisations are chipping in as flag-bearers of human rights and eco-friendliness leads analysts to think of "a new public-private hybrid form of value chain governance" (Fold and Neilson ibidem: Squicciarini and Swinnen (2016: 203)). The old form was co-governed by the public marketing boards in the producer countries, of which only Ghana's board is left after reforms. In the 'old' COCOBOD we encounter another monopolistic market actor with which the multitude of small farmers and the benevolent civil society actors are confronted. The role of the Ghanaian public player is much more significant than often thought (see sections on the board below). A thorough analysis of the cocoa value chain governance, which takes into account the actual influence on commercial and non-commercial issues, especially: on prices, is still not at hand – another of the lacunae that we have started to enumerate in this paper.

On the ground with the cocoa farmers

Groups of participants in multi-stakeholder dialogue forums are overlapping yet not identical. Leaders of the respective dialogue structures are different. So are the agendas and this to an important degree, as we will see. We can thus speak of socio-economically, politically and even culturally **distinct arenas**. Why is this important for the understanding of cocoa production? In all West African producer countries, the livelihood of the vast majority of cocoa farmers seems to hover at or below the poverty line. Farm-gate prices do not appear to suffice for decent work and a living income. A dearth of data (see the section below) prevents us from making too bold a statement, yet this is the reality according to most analyses. In the specific case of Ghana, how does the precarious situation impact on the agenda of the local stakeholders – farmers, extension workers, fieldworkers of aid agencies? Based on the available evidence it can be deduced that two major themes are squarely at the centre of interest:

- Good cocoa farming practice
- Forming farmer cooperatives.

The two themes are intrinsically linked because sound agricultural practice is difficult to implement for individual, non-organised farmers. In consequence, Ghana's COCOBOD via its Cocoa Health and Extension Division (CHED) is mainly targeting cooperatives. Other private (company) or public actors also encourage farmers to form cocoa cooperatives or other forms of producer organisations, and subsequently assist them with what is commonly known as Good Agricultural Practice (GAP). Farmer Business Schools (FBS) of one kind or the other as well as on-farm extension work are the two main activities. How does this work on the ground, in Ghana? (See Box 1)

Box 1: Three days in a farmer business school in the Ashanti region⁹

Here, as elsewhere in the country, one of the about 500 CHED extension workers gathers the 20-25 members of a farmers' cooperative for morning sessions at 7 am. The session is held on the premises of the local Area Council. The group is almost gender-balanced. For teaching purposes in the FBS, written material produced by GIZ for the cocoa board of Ghana and institutions in other West African countries is at hand: training notebooks and corresponding flipcharts. The trained extension worker puts it to good use. While the material is in English he explains in Twi. The session is regularly animated by the trainer shouting "Ghana!" with the group responding "Cocoa!", and vice versa: "Cocoa – Ghana!" The atmosphere is good.

But content is more important than class atmosphere. The teaching focuses on nothing other than the basic farming cycle of cocoa, from the activities carried out in the beginning of the season down to (correct methods of) harvesting, fermentation, drying etc. Plus: how to better calculate and purchase essential inputs and how to possibly diversify into other agricultural products. With a few topical exceptions, the COCOBOD/GIZ material contains nothing but this.

Now, one could naively expect such basics to be known and passed on among generations in the two hundred years since cocoa was first introduced to Ghana. If this were true, the farmers at school would be terribly bored to be confronted with such mundane topics. They were not. 10 Group discussions were lively and participation rates high. The teaching material was constantly referred to. What was taught was definitely of relevance to the farmers. 11

Similar evidence was gathered in other cocoa-growing regions in Ghana (seven in all). The on-farm experience corresponded perfectly to off-farm teaching. In particular, issues involving spraying (against diseases), pruning and weeding had to be refreshed and demonstrated hands-on to farmers and farm labourers. For example, alternatives to the 6 days of fermentation on the farm were demonstrated, although most farmers are continuing with fermentation under a banana leaf cover. Not much from the high end of the global value chain filtered into the farmers' discussions under the canopy.

Many analyses point to such basic preoccupations of cocoa farmers and the corresponding focus of extension work. Most likely, they have only one explanation. Cocoa farming in Ghana is still such hard work, exhausting in particular for the elderly and women, that most farmers have to concentrate on the very basics to get the work done. This is all the more difficult as many peasants cannot afford to hire labour, at given farmgate prices; if they have caretakers or sharecroppers none of them are likely to make ends meet. As such, it is practical confirmation that cocoa farming at the lower margin hovers around the poverty line.

⁹ The actual immersion took place from 11 to 14 February 2018 in the context of the Sustainable Smallholder Agribusiness Programme supported by the German government and co-facilitated by the Cocoa Health Extension Division and GIZ; cf. https://www.giz.de/en/worldwide/16002.html

¹⁰ We do not see it as a conflicting observation that all farmers had mobile phones and every ten minutes one participant walked out to answer a call. They all came back swiftly.

¹¹ The daily FBS has its sideshow. As the meeting room is located about 50 metres from the Accra – Kumasi highway, a constant flow of vehicles was observable. Every ten minutes or so a lorry carrying (a) huge timber logs, (b) charcoal or (c) giant bulldozers passed. The bulldozers were definitely too big to be used for anything other than mining – gold mining, that is. A proper roadside count would in its own way reveal the degree to which efforts to introduce sustainability into Ghana's countryside, including cocoa farming, are countered by adverse forestry and mining practices.

Agro-chemical glyphosate on a farm in Ashanti region



This is not to say that GAP taught and implemented is merely elementary. Taken together, the suggested improvements have the potential to multiply the current low yields. The roll-out of new activities seems to be cutting edge. An example is COCOBOD's campaign for handpollination by its teams. Artificial pollination has become necessary because the insects which pollinate naturally are becoming rarer. Those who recognize a similarity to current problems in European or US agriculture are on the right track. Deforestation and the use of agro-chemicals (see photo) appear to have contributed to the need for artificial pollination. With regard to this problem, GAP meets CAP.¹² The use of glyphosate on farms mainly reduces the burden of manual weeding, yet it represents the opposite of organic farm practice. Where farm labour force is scarce, recourse to such unsustainable practice is indicative of lowlevel constraints.

This is related to the two problems that have triggered the international interest in sustainable cocoa — child labour and deforestation. Recourse to **child labour** has been a

notorious method in cocoa family farming to alleviate labour constraints on the back of the farmers' own or 'hired', even enslaved children who should all be in school. In Ghana, child labour in cocoa farming has apparently declined – to an extent that even in the harvesting period almost no under-age worker is visible working on farms during school hours, while schools are full to the brink.¹³ Yet to be subjected to more comparative research and to proper up-to-date reporting by Ghana,¹⁴ this development seems to indicate that in this regard a gap is opening between Ghana and Côte d'Ivoire. Bastions of child labour in Ghana appear to have shifted to artisanal gold mining, fishery and urban sectors. Where child labour still prevails it hints at the underlying factor of workforce scarcity on the farm.

¹² CAP is the Common Agricultural Policy of the European Union, struggling with numerous unsustainable features of conventional agricultural practice of which agro-chemicals are only an example. Since a new CAP reform was started in 2017 the question of how smarter agricultural subsidies than the current so-called decoupled payments can enhance sustainability has taken centre-stage.

¹³ CHED agents and international cocoa companies themselves confirm that child labour still exists in Ghana, mainly in remote, less controllable areas. Yet in the EDP exposure samples from 2017 and 2018, the remoteness or accessibility of host villages showed no variance with regard to child labour. In this author's host family, somewhat better off, two elder sons helped their father bring baskets of okra home for marketing in the afternoons, hardly an instance of child labour either.

¹⁴ According to a widely quoted University of Tulane household survey, child labour in Côte d'Ivoire is up 50% to 1.2 million (2009-2014) while in Ghana it is down to 0.9 million. Similar yet anecdotal evidence has been generated by journalist visits, such as those organized by Callebaut, which also points to a less dramatic picture of child labour in Ghana. This has to be taken with more than one pinch of salt as it will almost certainly be subject to an optimist's bias – as is our own.

Deforestation in Ghana's cocoa farming contributes to the pattern. We understand that the shifting of agriculture towards new virgin forest areas along "cocoa frontiers" was always an inherent pattern in global cocoa farming. (Ruf 1995) Clearing forest land brings easy advantages, beginning with better soil quality, low initial levels of plant disease and weeds compared to mature cocoa farms – effects that Ruf has conceptualised as the "forest rent" at the planting frontier, important for a crop with very high disease risks. The pace of deforestation for new cocoa farmland seems to be driven at least in part by the growing financial inability of farmers to replace ageing trees on the same site and wait for them to grow. At the same time, virgin forest is becoming scarce in Ghana and Côte d'Ivoire, aggravated by the shift of agroecological zones in Ghana. Climate change is reducing the agro-climatic band in which cocoa can be grown by pushing it southwards at an increasing speed. Mapped predictions show that suitability for cocoa growing in 2050 will be 'less' or even 'much less' in large parts of Eastern, Western and other Ghanaian regions (as in central and eastern Côte d'Ivoire), with only small strips becoming more suitable. (Läderach, Martinez-Valle, Schroth et al. 2013)

The same shift means that the conditions which are appropriate for growing cashews, for example, are expanding to the south. As cashews command stable and growing world market prices, the trend to substitute cashew for cocoa will be accentuated. Such appears to be the reality regarding the indirect competition between the two crops. Cocoa is losing space. Deforestation appears to be partly driven by binding micro-economic constraints of cocoa farmers, while itself being restrained by overall land scarcity. In consequence, smart anti-deforestation strategies have to address both the globally active drivers and the country-specific factors which are indicative of a narrowing cocoa frontier. (See Kroeger, Bakhtary, Haupt et al. (2017); (Kroeger, Koenig, Thomson et al. 2017))

However, overuse of agro-chemicals, child labour or deforestation were definitely not recognizable as the main concerns of the Ghanaian cocoa farmers we met. It is rather their basic constraints that in turn drive these ecological and ethical issues. Consequently, the much-debated issues of how to obtain certification by Rainforest Alliance/UTZ or similar organizations, i.e. how to become labelled Fairtrade or organic played a surprisingly small role on the ground, even in districts partnering with companies which pay premiums, among them Tony's Chocolonely®, arguably one of the most generous and dedicated firms in terms of CSR criteria. There appears to be a significant **agenda gap** or shift between the local arena and all higher or wider arenas and their stakeholders. What is highest on the international civil society agenda is not automatically what is most important on the Ghanaian cocoa ground: The higher-order sustainability concerns of international consumers and campaigners are not necessarily the most pressing ones to sustain cocoa farm life. Conversely, they appear as negative offspring of the underlying constraints on cocoa farming. The issue is not really new. Among many others, Fold and Neilson noted that the "in-house sustainability" programmes frequently mounted by the big companies in origin countries, with or without their own certification schemes,

"appear to reflect an increasing corporate scepticism towards the effectiveness of certification alone to improve farmer welfare and increase agricultural productivity." In: Squicciarini and Swinnen (2016: 205)

This is absolutely not to say that initiatives like UTZ or Fairtrade are off-target, as on the ground they often address the same issues of good agriculture, yet effectiveness and focus may be an issue. The qualification and certification schemes are also not technically or financially irrelevant for the Ghanaian farmer, let alone for the European chocolate consumer.

Arguably, the evidence garnered on the ground confirms a more fundamental problem. West African cocoa farmers as a group have long been assumed to operate in what is called in development economics a low-level equilibrium trap or simply a **poverty trap**:

"Smallholdings, poor education and low yields conspire to keep farmers stuck in a trap of low returns." (Ryan 2011: 62)

In development theory, micro-economic low-income or poverty traps are quite a technical concept. As much as for developing countries at the macro-level, there are a number of definitions for low-income traps at the micro, here: the farm household level. They all have two important features in common: the actor cannot (reliably) seize opportunities to escape the trap, even if they are available, because of internal or external constraints; external shocks such as major harvest or health risks have a high probability to push actors back to where they came from. The evidence named above, partly anecdotal as it may be, appears to indicate that a majority of Ghana's cocoa farmers are just struggling to get by. They are struggling to such an extent that their degrees of freedom to seize economic opportunities are much reduced – including those shown by GAP advisors. This does not only apply to the average small-holder cultivating 3 to 4 acres of cocoa plantation. It may even be an issue for the comparatively few business-minded farmers such as those portrayed in the EDP host's farming experience below (see Box 2)¹⁶.

¹⁵ See Azariadis and Stachurski (2005); Bowles, Durlauf and Hoff (2006); Carter and Barrett (2006); Easterly (2005); Nelson (1956).

¹⁶ Extract from Exposure Experience Report by Jörg Hilgers (manuscript; unpublished)

Box 2: Constraints on a 'better-off' cocoa farmer and what extension has for him

EDP host farmer Francis,* aged 58 years, is a case in point. Along with his wife and at times up to five casual laborers, he cultivates an above-average-sized cocoa farm inherited from his father. The overall total land under cocoa cultivation has a size of 42 acres, intercropped with plantain and cocoyam (7 acres each). Francis is the caretaker on behalf of the extended family owning the land. He attended GAP trainings and is a 'facilitator' of the "Farmers' Hope" group in his village. He is very dedicated and hardworking. According to a visiting CHED Extension Supervisor, he is "very informed about what is actually going on in his farm. Francis knows the sensitive spots such as diseased or over-aged trees on parts of his farm; and he does what he can to deal with it." An assessment worth noting as this does not often seem to be the case among the average Ghanaian cocoa farmers. Taking into account 'state-of-the-art GAP extension advice', the huge amount of work on his big farm cannot be handled by the couple. This is even more the case because Francis' wife is sick and none of their adult children is interested in or capable of doing farm work. Due to the presence of German visitors, the CHED Extension Supervisor was allowed to spend much more time than usual on a particular farm. He realized that despite Francis' good farming skills the farm's output is far below the national average yield per acre (ca. 0.4 MT). Due to work-overload Francis subsidizes the less profitable parts of his intercropped cocoa plantation with the income generated from the proceeds of the more profitable parts. He advises the farmer to sequence the application of GAP on well-defined subsections of the farm. Francis was advised to identify the so far comparatively profitable part of the cocoa plantation (featuring healthy and younger trees bearing the most cocoa pods) and make it even more profitable by focusing all labour and other inputs on them for the next two years. Once the farmer realizes that he can increase profitability on that particular plot, he should move to the next one or two acres of the cocoa plantation and focus all his labour and expertise on it. - Yet the generational challenge remains. The expert advises the development of a farm management succession plan: "Please call for a 'general assembly' of your extended family and make them very well aware of the characteristics of their land. Show them every challenge and where you see the highest potential. Please confer on how you are going to deal with farm land division, succession of land ownership and transitional management, once you, the current caretaker, are no longer in a position to both perform the work and oversee your labourers. I fear failure to do this means that your physical strength, naturally diminishing over time, or any serious health problem in the family will be the end of your big farm that still has so much undeveloped potential." (*The name has been changed)

National and international GVC support schemes have to adapt accordingly and drop over-ambitious content, to which as we have seen the training material grossly corresponds. Where even then *partial adoption* of training content occurs, it is in itself an indication of the trap-like situation, marking a reversion to second- or third-best practices despite the obvious resolution of the farmers. Monitoring and evaluation of adoption rates can give an accurate measure of this, provided that other factors hindering adoption are controlled for.¹⁷

¹⁷ A 2017 evaluation of the German BMEL-BMZ-funded Pro-Planteurs project in Côte d'Ivoire also points to unsatisfying adoption rates for the training received by just 18 pilot cooperatives, but does not give adoption (outcome) or impact figures.

Dearth of data

Unfortunately the basic data which could be used to assess poverty at the farm level in Ghana appears to be scant. Surprisingly after years of debate among concerned stakeholders and researchers, there are two main gaps in data with respect to the cocoa value chain: one is on production costs and returns of the farm unit; the other is on family livelihoods at the household level. Côte d'Ivoire and Ghana are the two countries which were the cradle of Living Standards Measurement Surveys (LSMS) in the 1980s, which have long since evolved into a well-established tradition of Household Budget Surveys (HBS) across Africa – the basis for the calculation of poverty figures in developing countries. Especially in these two countries, one would have expected otherwise for data availability.

Not least, there is the Ghana Cocoa Farmers Survey (GCFS), a farmer-level, five-year panel survey conducted every other year since 2002, with support from Oxford University. IFPRI authors calculated a trend in poverty incidence based on Ghana Living Standard Surveys (GLSS) and found that poverty, including extreme poverty, declined among cocoa farm households from 46% to 34% between 2005 and 2012. (See Kolavalli and Vigneri (2017: 12; 135)) Yet in the absence of a measure for the poverty gap – the distance from the poverty line – and related sensitivity analyses, the significance of this data remains unclear. The authors themselves note:

Although poverty may be declining faster among cocoa-producing households than among other agricultural households, the incomes cocoa households earn from cocoa are barely enough to keep them above poverty. (Idem)

All this does not exactly amount to "some pilots here and there ... and no deliverables as of yet", as the VOICE network considered in 2017, but leaves important lacunae.

HBS compilers know that, for farms as much as for businesses in the urban informal sector, cases of observation are production and consumption units at the same time, and micro-economic farm viability does not equal a decent living for the farm family. The usual finding is that returns from cocoa sales do not amount to the required \$1.90 /person/day (the international poverty line) but this is nothing but a proxy for the household situation. The farmer's family comprises an unknown number of 'adult equivalents', as children of different age count differently, and other sources of income ranging from farming to remittances of family members in Europe count as well. This is income-based calculation; expenditure-based surveying is still more commonplace in Africa, but not all essential food and non-food expenditures are marketed and yet they must be calculated. For a proper consideration of poverty traps 'capital' assets – rather than flows – have also to be counted. In principle, such data is available from HBS but has to be matched with production-based data.

At this point, the debate moves into the normative area: should a regulatory body only pay attention to the micro-economic viability of the farm or a decent living for the farmer's family?! On average neither seems assured in Ghana. To cut a long unfinished story short, we do not know very much about this crucial area of cocoa-based livelihoods, but clarification can be expected from the publication of survey results from the initiative of the Living Income Community of Practice (here: GIZ, WCF, Sustainable Food Lab), based on the methodology of Anker and Anker (2017).

On cooperatives

One important right-hand variable in the above income equation is farmers' organisation. Most individual peasants would be lost in the transition to cocoa farming as a sustainable business, and CHED and partner organisations are reluctant to address them individually, for want of extension and training capacity.

Once again, both the situation on the ground and the available diagnostics are oddly blurred. On the positive side, the degree of organisation in cocoa farmer cooperatives seems to be slightly on the rise, to about 30 - 40 percent. Stakeholders who were consulted attributed this to the joint efforts of COCOBOD and its international partners, as chocolate firms organize 'their' own farmers. Indeed, the necessity of an external push was confirmed by all stakeholders interviewed. Some even go a step further and affirm that most cooperatives will die without continuous external coaching and agenda-setting. This is startling.

There is also no working apex structure, meaning a unified and independent national cocoa farmers union. This is remarkable for the most important commercial product in Ghana's modern economic history and contributes to the **absence of a Ghanaian national arena** in which to debate cocoa farming. Such an arena is badly needed to discuss cocoa strategies, in light of the fundamental challenges facing the sector, to hold COCOBOD responsible and above all to challenge the board's (or PPRC's, see below) fixing of the farmgate price. In consequence, it is not even possible to determine whether the *agenda* in one or the other *arena* is the same or significantly different.

At the local and all higher levels, the **low propensity to self-organisation** appears quite inexplicable. After all, Ghanaian farmers themselves discovered the prospects of cocoa a long time ago and certainly passed its secrets on to their offspring and peers. Little or no research seems to be available on the issue for which arguably the Spanish term *asociatividad* is the most appropriate. Ghana's countryside has ubiquitous traditional structures which should a priori be suitable for the purpose. Voluntary savings and loan associations (VSLA) mushroom, thanks to community development assistance delivered by NGOs such as CARE International in Ghana, World Vision, VSA, etc. Religious associations are omni-present. So, why not cocoa farmers' associations, at least not to the same extent? National policy, development cooperation and academia should have a socio-cultural theory on the matter and be able to answer questions of the following kind:

 Are associations overly political? Indeed, we are told that "Everything in Ghana is politicised", mainly between the two main parties, NPC and NPP.

¹⁸ Arguably the strongest representation of cocoa farmers with a dedicated policy of gender equality still is Kuapa Kokoo (https://www.kuapakokoo.com)

¹⁹ Along with UNDP, COCOBOD planned the mainstreaming of what is called the Ghana Cocoa Platform (GCP) into its line of activities. COCOBOD envisages "that the GCP mechanism will enhance dialogue amongst stakeholders on key issues in the cocoa industry for a sustainable cocoa" (Annual Report 2014). The platform has the support of the sustainable trade initiative IDH located in the Netherlands, of Mondelez and WCF. A GCP would have the obvious potential to become a centralising structure for the national cocoa arena. However, if the website is an indicator of liveliness to go by, note that the GCF site reports only on its first plenary and consultative sessions from 2014. (http://ghanacocoaplatform.org; last accessed February 2018)

- Are traditional structures and chiefs *compromised* as vehicles or drivers for cocoa associations?
- Are the political benefits of participation via farmers' associations unconvincing for potential members, in particular with regard to their limited ability to hold authorities to account?²⁰
- Are *economic benefits* resulting from association *not evident* to some potential members, mainly as farmgate prices for cocoa are identical for individual or collective sales (although this is not the case for inputs)? Inversely, the spreading of VSLAs gives weight to the assumption, because for this type of association the economic gains are more obvious.
- Are classic associations registered under the Ghanaian law simply too *cumbersome* to help farmers with specific business purposes?
- A low level of *social trust* does not appear to facilitate farmer groups, either. The sophisticated measures of social control introduced into the working of VSLAs appear as proof in reverse. However, levels of social trust are not an independent variable so?

No fresh theory is needed for the arguably most important argument: active adhesion to a cooperative comes with an opportunity cost for the farmer, again: especially for those hovering at break-even point. This is the same constraint already faced decades ago by non-agricultural SMEs trying to benefit from the so-called fully commercial approach of Business Development Services (BDS): small entrepreneurs often cannot afford to forego time and money to participate. In other words, time constraints in a poverty trap situation contribute to a low propensity to adhere to organisations which could theoretically improve the farmer's livelihood. More empirical evidence is obviously needed to measure the organisational propensity in order to recalibrate support schemes.²¹ Or national policy should be changed. Up-to-standard development cooperation needs a fully worked-out **Theory of Change** (ToC) for the matter and for the upgrading of smallholder cocoa farming at large.

The inter-generational problem of cocoa farming in Ghana

It is well known that Ghana and Côte d'Ivoire have an inter-generational problem with cocoa. Yet the degree to which this compromises the future of the whole sector seems still to be underrated, in Ghana at least. The average age of cocoa farmers encountered in farmer schools and on-farm training stands at around 50 years and is confirmed in the literature.²² In some sad way this corresponds to the ageing of their cocoa trees, which COCOBOD's CEO categorizes along with 'moribund' and 'diseased' trees at 40 percent. Ghana's cocoa farmers are ageing with their trees. The contraction of the cocoa frontier expresses itself in demographic terms.

²⁰ This is the argument of E.A. Brett (Brett 2003) following the seminal work of Robert Chambers.

²¹ However, as witnessed during the EDP exposure, CHED deliberately holds FBS sessions with its cooperatives at 7 am, before farmers go to the field, and attendance is high.

²² Monitoring of the FBS attendance by age groups can provide a more accurate figure for organized farmers. This is not counting 'absentee' farmers who are often younger and are not really absent but pursuing other economic activities locally while somehow supervising their farms. Deppeler et al. arrive at an average age of 44 years, unlikely based on our field experience, although they also exclude the latter social category. (Deppeler, Fromm and Aidoo n.d.)

This can be singled out as another life-threatening trend in Ghana's long history of cocoa growing, similar to that of the 1970s and early 1980s before the government of J.J. Rawlings began reforms. Viewed simply as a demographic trend, cocoa *family* farming in Ghana will be dead in ten to fifteen years. For the farms that have complied with international standards it will be, so to speak, an assisted and certified death.

In a way similar to other problems of labour-market research, the Ghanaian cocoa challenge is also linked to the **aspirations** of economic actors, here: of the young. We did not come across a single family of cocoa farmers in the villages we visited, in Ashanti, Brong-Ahafo, the Central, Eastern or Western regions, where sons or daughters are willing to take over the family farm as active farmers, yet we recorded numerous testimonies of prospective heirs stating that they definitely do *not* want to do so. An agronomist in the CHED extension team even told an interviewer that she wants to revert to her own farming but to do it elsewhere, not by taking over her father's cocoa farm. The young generation appears to prefer **alternative livelihood options**. Trends such as these can even be expected to accelerate for young farmers when the GoG's new flagship programme "Planting for Food and Jobs" gains momentum, as the programme will explicitly target *non-*cocoa agriculture.

Young people leaving cocoa because they aspire to urban jobs are aggravating **labour scarcity** in cocoa farming. This represents a paradoxical feature in Ghana's economy. Ghana shares with most other African countries the pattern of delayed demographic transition, resulting in huge cohorts of young working-age people for which no adequate job supply is in sight. The dominant macro-economic picture is therefore one of **labour abundance and job scarcity** which is arguably one of the most acute development challenges for Africa and not much of a 'chance' as it has been described for some years.²³ Within Ghana's cocoa economy we thus encounter a true **micro-macro paradox**, not the only one in development economics. In fact, nation-wide job scarcity for the 300,000 – 350,000 workers who enter the labour market every year adds to the critical trend observed: when the young workforce leaves the cocoa family farms despite the fact that finding jobs in other sectors is anything but certain, and still reveals a preference to bet on the urban job lottery, then smallholder cocoa farming must be in very dire straits.

In any case, even the inheritance of economically viable plots is complicated by extremely difficult Ghanaian inheritance laws, traditional and modern, matrilineal and patrilinear, or a mixture of both resulting in a paradox known to anthropologists. This trend will possibly be masked or delayed for some time by the spread of share-cropping systems such as *Abunu* or *Abusa*, where caretakers manage the farm on behalf of the owner.

15

²³ For an overview of related research see Asche (2016a; 2017).

Suggested scenario building

The end of small cocoa family farming as we know it today would not necessarily imply the end of cocoa in Ghana. Analysts and agricultural policy can address the issue by means of scenario building. The multi-stakeholder dialogue may also want to take up these scenarios for a sharper strategic focus, if the insights presented here are not entirely off-target. Four main scenarios stand out:

- 1. The baseline scenario: family farming will linger on, based on an inconsistent mix of support programmes for cocoa farming with farmgate prices still too low to earn a decent living and with non-transparent institutional structures. Islands of excellence will punctuate the depressed area, as much geographically as in terms of services provided, and blur the picture.
- 2. The 'death in the family' scenario: an actual demise of 'Ghana Cocoa' along with the dominant small-scale family farming system. In the end, international buyers will have to turn elsewhere. Ghana will then mainly export oil, gold and crops like cashew nuts or palm oil.
- 3. The social revolution scenario: continuation of 'Ghana Cocoa' within a completely different social and property setting, with a concentration of plots into far bigger entities, run by managers of different sorts, extending the present sharecropper system into large-scale outgrower schemes for international cocoa buyers and local processing firms. Most owner-farmers will become farmworkers.
- 4. The modernisation scenario: consistent upgrading of family farming and share-cropping systems, with reinforced input and service provision and revision of the price structure, putting Ghana's family farms on a completely different footing. This scenario can be further broken down into variants with predominantly public or private service provision and marketing, in particular redefining the future role of COCOBOD and its technical and commercial sections in the value chain.²⁴

In contrast to similar exercises, we do not consider the baseline scenario as the most likely one. Based on all the evidence gathered, scenario No 2 is unfortunately the one which is most likely to materialise. The demise of entire countries or regions as cocoa producers has been seen from Bahia to Malaysia, where cocoa plantations completely collapsed in the 1990s. In one scenario, it is now Ghana's turn.²⁵

Furthermore, the scenarios delineated above are largely independent of the certification process. Obviously, certification in compliance with Rainforest Alliance/UTZ, Fairtrade or organic farming works best with scenario No 4, but it could strangely live on in the scenarios No 1 or No 2. Nevertheless, the scenarios are not fully 'beyond certification', because failure to stop rampant deforestation (or conversely:

²⁴ It would be interesting to reconcile this with GoG's own earlier cocoa scenario building in *Ghana Cocoa Board, The future of Ghana's cocoa sector*. "Building in robustness and resilience to What IF?" Scenario Planning Report. Accra 2015. As the scenario building did not identify key aspects of COCOBOD's management, Kolavalli and Vigneri (2017: 5) have explicitly described their publication as a gap-filler.

²⁵ Those who consider such a statement 'alarmist' should note that the Cocoa Barometer 2015 stated it in these terms, after broad consultations and references to media reports all asking the same question: "Is the world running out of chocolate? Probably not. But the world is running out of cocoa farmers. Younger generations no longer want to be in cocoa. Older generations are reaching their life expectancy." (Fountain and Hütz-Adams 2015b)

the exhaustion of available virgin forests) will almost certainly contribute to the occurrence of scenario No 2. Finally, it should be noted that a 'harness globalisation' scenario is not part of this proposal: a situation where world market prices and the factors determining their irregularity are brought under control remains a distant dream.

GoG and COCOBOD obviously envisage some variant of scenario No 4 "to reverse the declining trend and to increase production to more than 1 million metric tonnes per annum within the next four years", as the new CEO put it in 2017 on the occasion of an EDP stakeholder workshop.²⁶ He enumerated nine initiatives which are presumably also included in the Ghana Cocoa Sector Development Strategy II (CSDS II). Some of the initiatives look promising. In light of the above, it is telling that COCOBOD initiated some years ago a campaign to counter the trend and to attract young people to take up cocoa farming. The official aim is "to encourage the youth to take over from their ageing parents in a professional manner and to shift the paradigm from subsistence practices" to farming as a business (quote from website). Along with partner organizations, a top-performing young farmer is honoured every year and awarded a prize.

In support of farmers, CHED provides seedlings for free or at subsidised rates. A new generation consist of hybrids developed by COCOBOD's research institute CRIG (using conventional cross-breeding, not GMO) which provide (a) better resistance to plant diseases, namely CSSVD, (b) early bearing, (c) higher yields and are (d) drought-tolerant. Combined with good practices on the farm, the potential for yield increase is enormous. CHED displays cocoa trees from demonstration sites where the trunks are literally covered from top to bottom with pods. COCOBOD has also introduced mechanical pruners and slashers and solar pumps via its cooperatives – a beginning of farm mechanisation.

The list of well-intentioned initiatives and programmes goes on. The problem with them is fourfold: First, to our knowledge the recently finalized Second Cocoa Sector Development Strategy has not yet been approved and budgeted by parliament. Second, there are numerous programmes and projects to be implemented under CSDS II; COCOBOD does not coordinate them all, yet arguably it should. Third, it is not yet clear whether the governance problems which particularly affect COCOBOD's input and service delivery have been properly addressed (see also the COCOBOD section below). Fourth, no schedule appears to be available for the roll-out of the activities and estimated outcomes or impact with regard to the aforementioned challenges. In the absence of ex ante assessments, it cannot be properly assessed whether scenario No 4 is realistic, and fallback on scenario 1 or 2 must be considered by default.

The listing of various initiatives can be systematically categorized as a search for alternative farm business models, as described in Hütz-Adams and Bergau (2017). Designed to be inclusive and sustainable, such alternative models would have to underpin any variant of scenario No 4. However, a review of Hütz-Adams/Bergau shows that these alternatives are contingent on price levels and stability, high degrees of farmer organisation, diversification, reliability of commercial actors in the chain, and a stable political environment – all factors which have so far prevented the occurrence of a comprehensive cocoa modernisation scenario in West Africa.

²⁶ Address by Hon. Joseph Boahen Aidoo on 10th February 2017.

On prices

The last section focused mainly on technical innovation and the improved quality of input material. The other set of variables is output and input prices. We will start with the cocoa price and shed some light on the problem of inputs in the sections below. Cocoa beans have two main prices – the world market price and the farmgate price which is nation-wide the same in Ghana. We will briefly address the former.

World market prices for cocoa beans are a textbook case of the export dependency problems faced by Third World countries. The long-term trend confirms the Prebisch-Singer theorem of falling absolute and relative (terms of trade) prices for raw produce. Roller-coaster short-term fluctuations are acute and lend substance to the dominant view in the literature, according to which short-term volatility is even more dangerous to developing economies than long-term decline.²⁷ The fact that two countries in West Africa alone provide about seventy percent of world cocoa (Ghana being the one which even fetches a premium) has repeatedly triggered considerations of price control by the two main producer countries, even in the face of an oligopsony of only three major buying companies nowadays. Such control would require important financial means and storage capacity (outside the tropics) as well as good coordination, which means that it has only been tried once and to no avail by Ivory Coast, at the end of the 1980s. Efforts to both *raise* and *stabilise* the bean price have thus been relegated to the domestic producer price level, for the time being.

Farmgate prices in Africa still make up a small fraction of the final price of consumption goods made from cocoa – some 5 -7 percent for chocolate sold in Europe. Along with the nefarious effects of deforestation and child labour, this extremely small fraction has inspired the critical global debate. At least in Ghana, the producer price of cocoa beans is under public control and can be influenced to some extent both in its level and slope. The official farmgate price, which COCOBOD or rather its licenced buying companies (LBC) are supposed to pay, represents the cornerstone of regulation in the sector. On average it is said to represent up to 70% of the FOB export price, and has had an upward sloping trajectory since the mid-1990s (World Bank 2017: 28). Schematically put, the farmgate price has a number of main functions:

- 1. Providing a micro-economically sufficient farm income
- 2. Smoothing out the fluctuations of the world market price for the farmer, by means of a stabilisation fund
- 3. Withholding a margin for the running of the marketing board, the pre-financing of the campaign, the provision of subsidies and the provision of services that are supposedly given for free to the farmer or sold to him at subsidised prices
- 4. Allowing a margin for general government revenue, still from the difference between the export and producer price.

²⁷ For a detailed analysis of the factors that affect volatile cocoa world prices and what could be done about them, see the publications of C.L. Gilbert and more recently of (Hütz-Adams and Schneeweiß 2018); Squicciarini and Swinnen (2016).

To say that the fixing of the cocoa farmgate price has its technical and political complexities is an understatement. Not all analysts of the sector agree, as a matter of principle, with functions three and four as appropriate for a public entity because cooperative unions in tandem with private insurers and providers could possibly ensure the same or better services for farmers, so the story goes. While the Ivorian *Caisse de Stabilisation* (CAISSTAB) and COCOBOD were once similarly structured, the different institutional setups of today allow a comparison between market- and state-led solutions. The stabilising function is particularly delicate to manage. Overly optimistic calculations based on selling contracts early in the season can and actually have run marketing boards into deficits, jeopardising functions three and four as well. One thing is clear: The forward-sales mechanism on the proceeds of which the farmgate price is based in Ghana informs the farmer in advance about the price to expect, but it does not shield him or her from world price fluctuations. It offloads most of the risk onto the farmer via the price differential. This explains the World Bank recommendation for COCOBOD to reorient its forward-sales mechanism in order to guarantee *minimum producer prices*.

How is the difference of 30% or so between the world and the farmgate prices in Ghana obtained? COCOBOD does not disclose its calculation. This is awkward given that this is arguably *the single most important price* in the country, almost as politically crucial as the price of a loaf of bread, say, in Egypt or the petrol price at the pump in many countries. We do not know if any algorithm underpins the price calculation, how the balancing between on-farm and off-farm costs is done, etc. The COCOBOD website is mute on the matter. The latest available Annual Report has a lot of figures but does not have one on this subject, either.²⁸ As a Producer Price Review Committee (PPRC) gives directives to COCOBOD on the provision to be set aside for the Stabilisation Fund, it would be appropriate for this organization as well to divulge its calculus. COCOBOD apparently deducts the export tax, its overheads, a composite margin for marketing costs and one for so-called 'industry costs', which is an indirect way of making the farmers pay for inputs they supposedly receive for free (if they receive them at all). As the composition of these 'cost' elements remains non-transparent, it can be safely assumed that the effective tax rate on cocoa is much higher than the 3-4 % export tax.²⁹

Taxation in kind adds to the problem. When the farmer hands in his/her beans to the local purchasing clerk, a bowl from each bag is deducted as a 'community tax'. Communities seem to handle the deduction differently. Afterwards, one kilo is withheld from each bag for the provision and maintenance of the sacks and another one for its own weight. The former should already be covered by the COCOBOD margin for marketing costs. When, in addition, a fee for pesticides and fertilizer is deducted from the producer price that has already been subtracted from the net FOB price as an industry cost, *double taxation* and thus

²⁸ The last and only yearly report on the COCOBOD website is the 45th Annual Report of 30th Sept. 2014 (website last accessed February 2018). We do not know whether the fact that no more up-to-date annual reports have been posted has any relation with the irregularities discussed below. The reports would require the statement of compliance from COCOBOD's certified accountant KPMG.

²⁹ Even the World Bank country analysts do not have all the information. A recent WB Country Agriculture Note presents an estimate of 25-30 % effective taxation and considers this far higher than in other countries, namely in Asia, but remains remarkably unclear and contradictory as to the way the figures are obtained (World Bank 2017: 27-30). Nevertheless, this paper has been quoted in the European press, e.g. in the Neue Zürcher Zeitung of 9th January 2018.

exploitation of the farmer certainly becomes evident. Wide-spread cheating with scales amounts to the same.

It all boils down to the question of whether the basic incentive structure provided to farmers is just and efficient. Whether incentives are working for Ghana's cocoa farmers seems debatable at the very least. For Côte d'Ivoire and Ghana we have a unique indicator showing that at least *relative* incentives are distorted. Depending on the prevailing political situation and price fixing in either of the two countries, large quantities of cocoa bags are clandestinely transported across the border and sold. (see Box 3) Since inflation in Ghana reached two-digit rates in 2013 and the real Cedi price of cocoa fell, cross-border trade has accelerated again. Peasants and traders react quickly to market signals.

Box 3: Smuggling cocoa?

The literature uses the official term of 'smuggling' cocoa from A to B, to describe the phenomenon. This is awkward. ECOWAS is nominally a custom union in which free circulation of goods should be the norm, except for national security or serious health issues.³⁰ As Côte d'Ivoire has no legal government monopsony or monopoly anymore, the term 'smuggling' can at most apply to Ghanaian cocoa crossing the border, in particular as COCOBOD sells the cocoa harvest in advance. But again, it can be argued that the legal obligation for Ghanaian farmers to sell cocoa nationally to COCOBOD (or its LBCs) does run counter to the full working of ECOWAS rules. Any need for border controls is against the spirit of a customs union – something the EU is now debating at the occasion of the Brexit. Despite the free distribution of hybrid cocoa seedlings, fertilizers and agro-chemicals to farmers under the former administration (which somehow continues), producers are not in the same position as legally bound contract farmers. In any case, a joint selling system has been suggested to increase market power. In March 2018 the presidents of the two countries again agreed to harmonise the pricing and selling system.

Despite such critical evidence, the fixing of farmgate prices does not appear to be in the focus of the national informed public, of public development aid or of private companies that are willing to enhance sustainability at the bottom of their buying chain. The price is obviously considered a matter of national sovereignty. Instead, the international partners beat around the bush and focus on non-price issues or on voluntary premiums paid on top of given producer prices which do not suffice for a decent living. In this regard the development community is *working around the key incentive* for the cocoa farming sector. Admittedly, the long-standing aid initiatives that raise yield per acre in Ghana are one important way to bring production costs more in line with low prices, but the rationale of price-setting should be known in any case. Or as the VOICE network put it in a statement for the 2017 Cocoa Barometer:

"The sector has developed a broad and varied vocabulary in its approaches towards a more sustainable cocoa sector. On one topic, however, we seem to have far too little conversation: farm gate prices. There is no discussion on viable options to raise farm gate prices to the level that allows farmers to escape structural poverty and attain a living income." (ibidem, p. 1)

This has an institutional dimension to which we now turn.

³⁰ Except that the regional community has uniquely complicated matters with its ECOWAS Liberalisation Trade Scheme (ELTS) which requires all firms and their goods to be especially certified for free circulation.

COCOBOD and the political economy of Ghana's cocoa

Since 1947 the Ghana Cocoa Board has been the regulatory body and main buying and selling organization in the country. It is difficult to do justice to today's COCOBOD. Since the crisis of the 1970s and 1980s COCOBOD has come a long way. International cocoa companies are said to be satisfied with having a reliable trade partner and a single national interlocutor, which is also the reason for the long-standing cooperation with international banks. COCOBOD makes deliveries to them promptly, assures quality better than in fully privatized settings and thus justifies the world market premium for Ghana's cocoa. It also pays the farmers regularly. COCOBOD has devoted staff in its technical branches, namely in CHED, from its division chief down to excellent field agents. COCOBOD has always been indispensable in fighting the vicious cocoa diseases, doing research on the crop and providing indispensable extension services.

However, both its key role as a public marketing board and its technical functions have a flipside associated with governance issues. In terms of political economy, an institution like COCOBOD reveals an intrinsic dual character. On the one hand, it provides commercial and agro-technical services to the sector; on the other hand it represents a mechanism to exert political power and to economically exploit the peasantry by withdrawing an important part of the surplus produced. Which function prevails is subject to the changing country configurations but also to institutional path dependence (hysteresis) over time, mostly a negative one. The Ghana Agriculture Sector Policy Note quoted above describes the path bluntly in saying that

"successive governments have prioritized revenue collection, treating the final price received by farmers as a secondary consideration rather than an objective." (World Bank 2017: 23)

As if further empirical proof of the board's dual nature and its path dependence in action was needed, a COCOBOD scandal erupted at the end of 2017, amply reported in national and European newspapers. Irregularities disclosed after the new government of Ghana came to power were manifestly related to the various 'technical' functions of COCOBOD, in particular infrastructure provision, under the previous administration of CEO Opuni. Funds not accounted for amounted to an estimated US\$ 400 million. Later, the board's new chairman was quoted to have "found that a \$ 1.8bn loan meant to fund cocoa production in 2017 was 'all gone'". (The Economist, 10th March 2018, p. 38) The events came as a reappearance of proverbial *kalabule* at the helm of the nation's most important parastatal.³¹ This paper does not aim to examine the case in any detail. However, there are indications that the problem is not of a transitional nature between two administrations and can therefore not be understood in terms of partisan politics by putting all the blame on one party. Basically, the institution should have had, since long, informed political oversight from all relevant parties, a working audit function and due diligence by international financial partners such as Germany's private and state-owned banks for their pre-financing of annual sales.

³¹ See https://www.cocobod.gh/news details/id/129/ and: https://wk.reuters.com/article/ghana-cocoadebt/ghanas-cocobod-says-clearing-debts-after-wasteful-spending-idUKL8N1N76HH

Working with structures of "good-enough governance", as a recent debate in public aid quarters had it, and frequently with not-good-enough governance is daily reality. Working with good-enough governance structures or even with the not-good-enough can make developmental sense when progress can be made and sustained despite institutional shortcomings, through working with organisational segments that function normally, for example. Whether CHED, for instance, would qualify as such is an interesting subject of debate. Development cooperation in the cocoa sector has to be based on a strategic assessment of the partner organization in question.

An urgent need for (re-)focused multi-stakeholder dialogue or a **targeted policy dialogue** between national and international development partners, replacing the absent national dialogue arena on the matter, seems to follow from these considerations. Given the historic and recent experience with the dual-natured body it appears highly debatable whether international public and private partners of COCOBOD have already got the agenda straight.

Put in historical perspective – the peasant and the state

African crops, namely export staples, have been treated very differently by colonial and post-colonial authorities. Some were introduced to Africa by the colonial administrations with success. Others were introduced by the same authorities using coercion, yet flourished only after independence, with West African cotton being a striking example of this. Others initially took off despite the colonial authorities and against their explicit political will, with West African cocoa being the prime example of this.

In this respect Ryan found a characteristic statement; she quotes two British colonial administration reports from 1889 and 1938 painting the cocoa boom as a "spontaneous and irresistible, almost unregulated" undertaking of "small, independent native farmers" (Ryan 2011: 10). This has long been confirmed by anthropological and historical research. (Chauveau 1997; Cooper 2014) At the time, cocoa was one of Africa's most important agricultural innovations, largely *malgré les colonisateurs*.³²

Later, cocoa's important contribution to the region's exports became obvious to authorities in Africa and Europe and efforts to organise agriculture and export were deployed, of which Ghana's cocoa board is an offspring. Yet the contradictory relationship between the cocoa peasantry and the state continued into independence. Ghana's first president Kwame Nkrumah perceived the extraction of cocoa value added as the way to generate funds for the country's planned industrialisation. In a situation where cocoa was the only major commercial crop it could hardly be otherwise. The idea was basically sound. However, the situation degenerated quickly. The country's industrial policy became voluntarist and economic basics were side-lined — an experience from which many lessons have been learnt for the concept of modern industrial policy in Africa (see the following section). The extraction of an agrarian surplus turned into pure exploitation of the farmers, and a grotesquely overstaffed COCOBOD played a nefarious role. The Ivorian CAISSTAB operated in a similar way until its dissolution during structural adjustment. However, as a cornerstone of president Houphouet-Boigny's administration, the CAISSTAB played a more balanced role

³² In the same vein, see the rich primary sources quoted in Kolavalli and Vigneri (2017: 17-20).

for a long time, because the Baoulé cocoa farmers were an essential part of his political constituency and he was himself the first president of the cocoa farmers' union. World-wide, Ghana's COCOBOD is probably the only surviving marketing board from this period whose mandate is still very broad, although its direct involvement in farming had to be abandoned.

Works such as those of Peter Bauer and Robert Bates (1981)³³ represent seminal analyses of the relationship between agriculture and the state in Africa. Based on comprehensive fieldwork in Ghana, Nigeria, Kenya and Tanzania, the latter identified three mechanisms of exploiting the African peasantry at the time:

- 1. Export duties
- 2. Overvalued exchange rates
- 3. Marketing boards.

All three can be considered ways of *taxing* farm income. The incidence of export duties is straightforward in this regard: the tax is not borne by the American or European consumer but by the African producer, as he is a price-taker in the world market. Overvalued exchange rates hamper export products that are facing global price competition but help a politically alert urban constituency to get cheap consumer goods imported – hence the *urban bias* which, since Bates, has been associated with such policies. This is why attempts at massive devaluation have routinely marked "the death knell of most governments in post-colonial Ghana", as the editors of the Aryeetey and Kanbur volume on Ghana's economy (2008: 9) put it. By enforcing artificially low producer prices, marketing boards deprive farmers of another part of their surplus.

Early on, marketing boards became a prime target of market-radical critique in development economics, and historically for good reason.³⁴ Later in the process, government-run marketing boards came to be the public enemy of multilateral institutions. The World Bank and IMF dismantled many of them via structural adjustment programmes, to the extent that some authors in the GVC literature consider public value chain regulation or co-governance a thing of the past.

Yet all three mechanisms are still in place, in various configurations. (1) Ghanaian cocoa beans are subject to an export tax which was reduced from 33 % in 1995 to an acceptable 3 % in 2005, in contrast to Côte d'Ivoire, where the tax still stands at 30%. However, we saw that an undisclosed percentage of the COCOBOD overheads does not correspond to actual marketing or 'industry' costs and de facto represents an additional tax. (2) A notoriously overvalued exchange rate impacts all the neighbouring FCFA countries (Nubukpo, Ze Belinga, Tinel et al. 2016). Cedi or Naira appreciation may affect Ghana and Nigeria again if the exchange rate recovers along with the oil price, inflicting a characteristic 'Resource Curse' or 'Dutch

³³ Updated for Kenya in Bates (1989) and much later for the overarching institutional problematic in Bates (2006). Impressed by the historic policy failures in the countries under investigation Bates was never correct on the need for industrial policy in Africa but this does not detract from his pertinent diagnosis of agro-politics.

³⁴ Paradigmatically, see again P.T. Bauer or Ann O. Krueger (1974), admittedly both ultra-liberal pro-deregulation authors.

Disease' effect (Asche 2016c) on cocoa farming.³⁵ And (3) the Ghanaian cocoa marketing board is obviously still in existence, after several rounds of reform in the country.³⁶

The international debate became even more acrimonious for the marketing boards in Africa (and other developing regions) which are directly in charge of *food security* – that is, responsible for maize, wheat or rice. In light of the catastrophic droughts that struck Africa in the 1970s and 1980s, development aid had supported marketing boards with the dual aim of price stabilization and domestic food security, and so did German bilateral aid via its executing agencies GTZ and KfW. The marketing boards were badly run and politicised, as this author has observed at close range in Burkina Faso. Again, this episode ended with structural adjustment programmes which disregarded the food security function altogether. The ideologically charged debate continues in today's WTO negotiations, as US opposition to the maintenance of India's food security boards as market regulators testifies. Ghana's COCOBOD has an indirect food security mission as well, as its agents promote diversification into other crops and cocoa as an entirely marketed crop must suffice to buy bulk food.

Against this backdrop of a marketing board's dual nature, a new strategic consideration of the institutional setup in Ghana is badly needed. The IFPRI team is trying to fill the void and is basically defending Ghana's public marketing institution against all those advocating for dissolution or privatisation but has also come out against the protracted tolerance for opaque and exploitative producer price fixing. In comparison with fully liberalized cocoa markets in Côte d'Ivoire or Nigeria one can indeed emphasize that

"Ghana succeeded in revitalizing its cocoa sector without liberalizing the cocoa markets and while keeping the cocoa sector under the management of a board." (op.cit: 147)

The public board should arguably be maintained but reformed yet more thoroughly. What IFPRI beneficently considers as "the last mile of reform" will turn out to be quite a long stretch, firstly by IFPRI's own devastating account of COCOBOD's lack of transparency and deficient service delivery, secondly due to the need for even deeper-reaching measures for better governance. The treatment of cocoa farmers in Côte d'Ivoire and Ghana has indeed been singled out as neo-patrimonialism — a regime where political leaders buy loyalty through granting of inputs and infrastructures, say feeder roads to remote cocoa growing areas.³⁷ Irregular, insufficient and unequal input and infrastructure provision is the obvious precondition for the mechanism to work. Where such irregularities exist, sudden measures of alleviation in the run-up to elections may have the desired effect of buying political loyalty. It would seem that exactly this occurred under the previous administration in Ghana.

Lessons for good governance of present-day marketing boards may comprise the following:

³⁵ For Nigerian cocoa products (unlike Ghanaian), a tariff effect at entry into the EU market comes on top; see the trade policy section below.

³⁶ See Fosu and Aryeetey (2008) for a short economic history of economic growth and reforms in Ghana.

³⁷ For the proponents of the paradigm, the prefix (*neo-*) refers to the embeddedness of patrimonial practice in formal modern administrative and political settings. (Erdmann and Engel 2006; Van de Walle 2001; Van de Walle, Ball and Ramachandran 2003) For a similar configuration in another African country and crop (cashews) see Boys (2014).

- Depoliticise the board as much as one possibly can by shielding the institution, its board composition and decision-making from party politics or any other form of patrimonialism, almost like a central bank
- Introduce the utmost transparency into its operations, including price calculation, to protect the institution from both corruption and the suspicion of unfair dealings with the farmer
- Consider private sector alternatives to some of the board's technical services
- Put services rendered and inputs provided to farmers on a perennial, non-arbitrary basis.

If the input provision chain is regularised and the farmers' claims to certain services made legally binding and subject to neutral oversight, the 'neo-patrimonial' granting of favours would not work to the same extent anymore. With the experience of Ghana's "factional democracy" and its politicised spending sprees in mind, World Bank analysts have argued for years that Ghana should shun *discretionary* public expenditure as much as possible, especially from windfall profits due to oil export. While clearly exaggerated as a general rule for good economic policy³⁸, it should be retained for much of COCOBOD's policies. Current service delivery for cocoa is *de facto* selective and discretionary. Finding a lasting bipartisan agreement for non-discretionary, rules-based service delivery, including a proper division of labour between private and public providers, will probably be the right way to implement reform, through Ghana's fractured political landscape.

³⁸ Particularly with regard to industrial policy, this author has criticised the WB recommendation as an antinomy: most of industrial policy is selective, thus discretionary. (See Asche (2016c: 32), along with the WB sources) In other words, there are policy areas where selectivity and discretionary targeting is the norm and others where it is not.

Further down the chain

Ghana's government and the main political parties have joined all those who are now convinced that Africa cannot forego industrialisation, meaning broader manufacturing industry. This is in stark contrast to earlier ideological constructs advocated by some developmental agencies according to which Africa's comparative advantage lies with agriculture and mining alone. The challenge with regard to industrialization is increasing the seemingly immovable figure of less than 10% of manufacturing in GDP across Africa. In the same vein, Ghana's incumbent president came to power with the slogan "One district – One factory" which was adopted with its acronym 1D1F into the government agenda.³⁹

Industrial cocoa processing can considerably contribute to the task. The extremely unequal distribution of value added along the cocoa chain makes a compelling case for having some processing stages in Ghana: industrial transformation of raw cocoa accounts for almost half of the global value added and mostly takes place elsewhere.⁴⁰ Realizing industrial processing in the primary producer country represents a distinct challenge of GVC development that is not covered by efforts for good agricultural practice and certification, apart from the fact that the industry shares with the primary producers concerns for quantity and quality of the raw product. The specific challenges of industrialisation make that manufacturing in general has not yet taken firm root in Africa. For about a decade, these have led to calls for a modern industrial policy.⁴¹ One of the usual challenges, also present in West Africa, is import competition from advanced economies. However, the processing of cocoa and most other tropical crops falls into the category for which such import competition is irrelevant. This is in contrast to examples such as poultry products (in particular frozen chicken parts), dairy products (milk powder) or tomato concentrate, to mention only three items which have been much debated as import threats to Ghana's domestic producers, along with imports of processed cereals from Europe or America. Competition for cocoa lies squarely with processed exports. Here, economies of scale and scope are normally better realized in the advanced economies of the global North.

Consequently one would expect that industrial drying, grinding, roasting and all further stages of cocoa's industrial transformation will remain marginal in Africa and other tropical producer countries, in a way similar to coffee processing, for example. Surprisingly, this was never quite true for cocoa. To the extent that a consistent pattern can be derived from the literature (which is not the case throughout), infant industrialisation has proceeded in **two phases**:

³⁹ This slogan comes with its own challenges. Application across the board, disregarding the very diverse factor endowments and infrastructure conditions of Ghana's 126 districts, would make bad regional industrial policy, because economies of scale (inherent also in cocoa processing) exclude a geographical spread of firms for a number of industrial production lines. Politicised allocation of capital and posts to cronies of the ruling party is the other obvious risk.

⁴⁰ More precisely, 43 % for processors, grinders and downstream manufacturers, according to Fountain and Hütz-Adams (2015a), while the total value added of raw cocoa remaining in Ghana or Côte d'Ivoire stands at 10%, with the farmers fetching just 6.6 %. We say 'fetch' because economically this is not the value added they generate when they are paid below factor costs.

⁴¹ For a summary see Asche and Grimm (2017).

a. The first phase relates to the processing of cocoa beans, mainly grinding in the countries of origin, or 'origin grinding' in industry parlance. Historically, this phase itself consists of two halves: from independence to the 1980s and from the 1990s onwards. The Ivorian situation is better covered in the literature than the one in Ghana: shortly after independence (if not before) a number of domestically owned processing companies sprang up in Côte d'Ivoire with the help of the government. This stage of initial processing is said to have been motivated by the fact that grinding converts a perishable product, highly sensitive to humidity and mould, into an inert product, which is much easier to store and transport. (Araujo Bonjean and Brun in Squicciarini and Swinnen (2016: 345)) Yet most of the shipping still occurred in bags of cocoa beans.

The 1990s saw a major development in transport modes, again apparently in two parts: (a) bulk shipping of cocoa in large specialized vessels instead of sending bags, with so-called 'flat storage' at ports of destination and (b) the shipping of cocoa liquor. (Fold 2002) Whether due to or in tandem with the revolution in transport, all the bigger origin grinders were acquired by the global majors and new factories were established in Côte d'Ivoire and Ghana – an ongoing evolution driven both by major and smaller manufacturers. Now, there is ample primary processing of cocoa (= stage 1 in the box below) in Ghana and Côte d'Ivoire as well as some processing in Nigeria and Cameroon. According to COCOBOD figures, Ghanaian cocoa beans shipped overseas during the 2013/14 crop year totalled 721 thousand tonnes. A total of 253 thousand tonnes of cocoa beans were processed into **semi-finished products** by local factories.⁴² In this respect Ghana's and Côte d'Ivoire's fledgling industry did remarkably well. There is little doubt that the impressive figure of a quarter to a third of the total cocoa harvest (in terms of weight) being processed in-country is indicative of a sustained trend – as long as there is cocoa in West Africa.

b. Now a growing internal market for **chocolate and other final products** is extending the domestic value chain, or so it would seem. For many decades there were no domestic customers in Africa worth mentioning for chocolate, cocoa drinks or cocoa-based cosmetics. The constraints on chocolate were well known but some are now changing:

- The cocoa farmers and their families ate no chocolate because it was a luxury good for them, and still is.
- There was no middle class worth mentioning in Africa who would consume chocolate and similar products. Such a middle class is now emerging although there is an animated international debate on definitions and scope. A domestic market is emerging related to growing purchasing power and to the retail market revolution in Africa.⁴³
- Chocolate needs more intermediate products in addition to ground cocoa and some were difficult to find locally. In particular, there was no powder from fresh milk available to chocolate makers

⁴² This information is partly from COCOBOD's website and awaits further updating and verification. A similar magnitude is ventured for producers in Ivory Coast with a processing capacity of about 700,000 tons in 2013-2014, which corresponds to approximately 40% of the national cocoa bean production. However, the installed capacity of the 12 foreign-owned grinding companies is not fully utilized.

⁴³ For a comprehensive analysis of Africa's emerging chocolate market see Tamru/Swinnen in Squicciarini and Swinnen (2016).

in most African countries. The absence of a dairy value chain thus contributed to the shortening of the domestic cocoa chain.

- Chocolate requires storage at moderate or cold temperatures, which in the past were difficult to find in Africa outside the few supermarkets.
- Cross-border regional markets in Africa were barely integrated but integration would be important for the realisation of economies of scale in chocolate-making as well.

While the last factor has hardly changed – regional trade integration in ECOWAS is dismal – the domestic availability of intermediate cocoa products and of the other inputs now makes production for an internal market feasible. In contrast to the industrial infant stages described by the Reuters correspondent as late as 2011 (Ryan 2011), there is now some more chocolate production in Ghana and Côte d'Ivoire. Not all the chocolate tastes good, which seems due to a lack of proper grinding and the absence of conching, but it serves a market. In addition, there is some local manufacturing of cosmetic face cream and soap from cocoa and shea butter.⁴⁴ Across all stages, the local processors of semi-finished and finished cocoa products include Barry Callebaut, Cocoa Processing Company (apparently the oldest processor, in place since 1965), Niche Cocoa Industries, Plot Enterprise, Cargill (Ghana) Limited, OLAM (until 2015 Archer Daniels Midland (ADM)), BD Associates and Real Products.

Now, what explains the remarkable industrial trend? Is this purely market- and industry-driven, or has some kind of industrialization strategy succeeded for Ghana's cocoa? There are few such cases in Africa. To better understand the dynamic we first have to emphasize that most of the industrial capacity created is still linked to the activities around cocoa bean grinding (stage 1 in Box 4 below), while stages 2 and 3, the steps to making cocoa drinks, chocolate and the like, remain limited.

Box 4: Stages of cocoa processing and chocolate making

(Pre-)cleaning, (optical) sorting, screening, alkalizing, roasting (either of the whole bean or the nib), debacterization, winnowing, grinding, to obtain so-called cocoa liquor (or mass, or paste)

2. Chocolate mass (liquor, paste) production:

Pressing to separate butter (liquid) from cake (solid); crushing of the cake, sifting to obtain cocoa powder (for cocoa drinks etc.)

3. Industrial and final chocolate:

Dosing, mixing, refining, conching, tempering, enrobing, cooling, moulding

The Swiss company Bühler plc is the undisputed world market leader for cocoa processing machinery, along with other food processing equipment. Bühler's turnover in the region is a good measure of the industrial dynamic in West Africa. The company sells cocoa processing equipment throughout the West African region, to Côte d'Ivoire, Ghana, Nigeria, and Cameroon, with an annual order release of about US\$ 15 million (2016). The machinery serves at all stages of cocoa processing but most of the equipment sold

28

⁴⁴ See for instance: http://www.beautysecretsafrica.com.

in Africa is used to the steps before pressing. This is proof of where most of the dynamic in the emerging industrial chain still lies. Yet Bühler plc seems to have sufficient trust in the market trend towards origin processing that the company is planning to open a cocoa processors vocational training school in Abidjan scheduled for October 2018.⁴⁵

The most important local processing companies in Ghana and Côte d'Ivoire are the same three, formerly four global lead firms (along with ADM) who dominate the value chain up to cocoa liquor, powder and butter, with some leading and niche chocolate makers having joined in. Therefore, the situation is mostly one of foreign direct investment (FDI), either by merger & acquisition (M&A) or as greenfield investment. In particular, the global contract manufacturers seem to have an intrinsic interest in relocating some processing stages to the primary producer countries, in contrast to what we have observed with coffee, for instance, where local roasters in Africa largely remain niche producers. *Economies of scale* which have held back Africa's industrialisation in many other sectors are important in cocoa processing as well. While the smallest roaster handles 50 kg / hr, the minimum efficient capacity for stage 1 (roasting, grinding etc.) stands at 30,000 t / year. Given the export figures quoted above, this can apparently be realised in West Africa.

If these industrial beginnings were purely market-driven, cocoa processing would represent one of the rare cases where a commercial dynamic leads to more equitable integration of African countries into the global value chain. A market- or industry-related explanation in the literature links the expansion of origin grinding to the transport innovations from the 1990s onward. The intermediate products of solidified liquor/mass, butter, and cake/powder can now be shipped more easily overseas, but the main innovation was apparently in bulk transport and storage of beans. Still, an important part of exports is transported in containerized 64 kg bags, not in bulk vessels. Therefore an up-to-date statistic on the actual *four* modes of transport is needed before one can say how much of the growth in origin processing can be explained by these modes:

- 1. Classic 64kg bean sacks, mostly shipped in containers
- 2. Bulk transport (and storage) of beans
- 3. Export of cocoa liquor/mass
- 4. Export of cocoa butter and other intermediate products.

The extent to which new transport methods explain the growth in origin grinding is not fully elucidated or logical. In fact, origin grinding makes just-in-time (JIT) delivery of varieties of the intermediate product in the main consumer countries more difficult. The blending of mass and butter from different origins – a form of economies of scope – is hardly possible. After Fold's pioneering analysis of an industry which was

⁴⁵ The information and figures in these two paragraphs were kindly provided by Bühler staff members who participated in the EDP exposures. Alongside the main producing firms, Bühler plc also assumes corporate social responsibility for sustainable cocoa farming in the region, which is remarkable for an upstream company. Yet as we see in the commitment to vocational training, the company – a Swiss family-owned firm - seems to be following a dual strategy: investing in human capacity close to the value addition in the cocoa regions, taking into account local content rules, and following a human rights agenda, i.e. promoting the "right to proper education" (personal communication; Christian Walter; Buhler Group, Manager Business Unit Consumer Foods; Accra, 11 Feb 2018).

in full transformation in the early 2000s, no specific empiric research in development studies seems to have been devoted to the question which, if any, market powers explain origin grinding in West Africa.

Industrial policy at work?

Alternatively it has to be considered whether this trend is a response to targeted industrial policy efforts by the governments of Ghana and Côte d'Ivoire. Which support measures would an industrialization strategy for domestic cocoa processing consist of? Imposing an export tax (or quotas, or even an export ban) on the raw product in order to encourage so-called domestic *beneficiation* is a classic industry-specific policy measure. Historically, the early birds of origin grinding in West Africa did indeed benefit from tax breaks, among them an exemption from the export tax. Yet it seems questionable whether this exemption alone can explain today's new local investments in cocoa grinding in both countries. The Ivorian export tax invariably stands at 30 to 40 percent – high enough to foster origin grinding. In contrast, the Ghanaian export tax has gone down to 3% (and is absent in Nigeria), and the processing companies in Ghana only receive beans from the lower-quality light crop season at a 15-20% discount at the official export price (which is for high-season beans). Descriptions in two studies call into question whether this can be considered much of an advantage for domestic processing in Ghana:

"COCOBOD offers domestic processors a discount of 20% on beans produced during the light crop season. (Ecobank, 2014; Mulangu et al., 2015). The growth of processing capacities in Ghana has increased the competition for discounted beans thus reducing their availability. Although domestic processors can also purchase main crop without a discount or import beans from abroad with 20% duty (Asante-Poku and Angelucci, 2013), this is often not economically efficient as processors in general face high operational costs (processors interviews). As the result, processors are unable to procure sufficient quantities of beans and cannot operate at full capacity. In 2013/14, only around 60% of capacities of domestic processors in Ghana were used (Abubakar, RM&E (COCOBOD), pers. communic., 2016)." (Monastyrnaya, Joerin, Dawoe et al. 2016: 12)

The IFPRI authors argue in a similar vein:

"Ghana has stringent import regulations that discourage the importation of beans from other countries to improve capacity utilization. As a result, local processors have been demanding export-quality beans at a discount to compensate for higher production costs. Ghana usually supplies local processors with lower-quality light beans at a discount of nearly 15 percent of the export price. Processing was expected not to grow in 2014/2015 because of the scarcity of light cocoa (Ecobank 2014b). The supply of light cocoa in Ghana is expected to remain a problem in the medium term; Ghana's light crop was estimated to be 20,714 tons in 2013/2014 while Cote d'Ivoire's was nearly a half a million tons." (Kolavalli and Vigneri 2017: 125)

In consequence, the skewed support structure would not qualify as well-targeted industrial policy in Ghana, other than in the way earlier studies already had: a strategy for processing low quality beans, otherwise not suitable for export, into a sellable product.

Other tax advantages comprise those generally granted for foreign direct investment and usually contained in an Investment Code. Still more favourable fiscal treatment is granted to firms in Ghana's Export Processing Zone (EPZ). Some cocoa processors are indeed located in the Tema EPZ. Here they also

⁴⁶ African governments defended the use of this classic tool and the possible imposition of new export taxes quite successfully during the EPA negotiations – against the explicit will of the European Commission.

obtain better infrastructure conditions (roads, electricity, water) than elsewhere in the country. Apart from the physical infrastructure, free zone advantages in Ghana are extended to firms located in other towns, creating a virtual special economic zone across the country (see www.gfzb.gov.gh/gfzb-advantage.html). So an OLAM processing factory in Kumasi may benefit from the same package but nothing of all this specifically helps the cocoa-chocolate value chain.

The most interesting hypothesis for what explains origin processing does indeed not directly relate to industrial policy but to the overarching concern regarding *physical cocoa availability* on the market for which the big trader-processors bear the main responsibility. Again, this is political economy: you are granted privileged access to a primary product with an unstable supply because you process part of your purchases locally, which generates political good will and brings you closer to the primary producers and their worries. This positively reflects the industry's preoccupation with the future of West African cocoa, even if, micro-economically, origin grinding and pressing are not the optimal location in the chain. In this way, the commitment to process part of a company's cocoa purchase domestically can also be interpreted as a response to implicit or explicit **local content rules** (LCR). Mandatory LCR seems to contribute to the expansion of origin grinding at least in Côte d'Ivoire.

So in the end a textbook effect prevails which the FDI literature terms *resource-seeking investment*, that in this special case implies: investing in downstream processing to secure the raw material supply. By the same token, the motivation for local *processing* of cocoa reflects the concern regarding the future of Ghanaian and Ivorian cocoa *growing*. The physical availability of cocoa obviously is the key issue.

In sum, the emergence of cocoa processing in Ghana is supported by several targeted yet contradictory industrial policy measures for cocoa and by a mix of general and EPZ-related packages. Such a package does not automatically make good sense in industrial or wider developmental terms. There are two problems. First, it is a well-known issue of policy coherence that (a) standard FDI promotion (typically contained in the Investment Code), (b) EPZ benefits and (c) genuine industrial policy incentives overlap or duplicate each other. The general problem relates to our introductory question for the chapter: Provided that this sector has a commercial dynamic of its own, to what extent can domestic processing be attributed to the generous tax breaks or is this simply a case of free-riding companies? In all likelihood and subject to further research, industrial policy and general investment promotion have both contributed only moderately to the spread of cocoa's industrial transformation in West Africa. The provision of lower-quality cocoa, if it still prevails, even has a negative effect on downstream processing.

Incentive packages are costly in terms of foregone tax revenue. If most origin grinding and pressing can be attributed to resource-securing investment, GoG has to think twice about the financial and broader developmental implications of its industrial promotion. Primary cocoa processing is not really labour intensive. In the beginning of this decade, about 1,800 jobs have been created in cocoa processing. Today the number is believed to still be in the lower four digits. Yet tax advantages granted shall have a positive relation with the wage bill of the industry, and the quality of workplaces created. The very labour-intensive cocoa farming faces heavy taxation at the farmgate, as reported above, while the downstream industry does not. Therefore, recalibration of fiscal treatment all along the chain will be in order. In other words, an economic and social cost-benefit analysis of the incentive structure for the whole sector is required.

This could be part of a wider exercise to rationalize Ghanaian tax exemption schemes which the World Bank has recommended. (World Bank Africa Region 2018)

Critical considerations continue with other inputs. Where do *milk and sugar* for chocolate-making come from? Industrialization strategies and GVC promotion also aim for domestic upstream or horizontal/diagonal linkages. Do milk powder, sugar and packaging material come from domestic or regional sources or from imports of European origin? Free Zone benefits are likely to be counterproductive in this regard as they exempt investors from import duties not only for capital goods (which is appropriate) but also for variable inputs. EU milk powder exports to Africa are still indirectly subsidized in Europe to a considerable extent. If the input unsurprisingly comes from imported milk powder, this means the fledgling Ghanaian and Ivorian chocolate industry is part, albeit to a modest degree, of the controversy about the impact of EU agricultural and trade policies in Africa. Textbook industrial policy tries to counteract such overreliance on imported inputs with adequate local content regulation. Ghana has made a considerable legal effort to prescribe realistic local content to her expanding oil industry. We are not aware of such local content rules for the cocoa processing industry, except in the general sense mentioned above.

In sum, the industrial policy chapter for Ghana's contemporary cocoa value chain has not yet been written, as little as for the agricultural part. In consequence, a full picture of challenges and opportunities for international cooperation involving private and public actors cannot yet be drawn. The considerations outlined in this paper come close to being terms of reference for an industrial sector study; and international technical assistance for trade and industry finds a huge field of intervention here that aid agencies have just started to act upon.

Cocoa and EU trade policy

There are still more trade policy problems with Ghana's cocoa value chain. Negotiating a conducive international trade environment is part and parcel of GoG's job description for agro-industrial policy. Ghana's relationship with the EU is of prime importance, and the above-mentioned critical cases — the frozen chicken, wheat and tomato paste imports — are testimony to this. Contrary to widespread belief, European trade policy is not decisively hampering the export of Africa's domestically processed agricultural products to the EU, including cocoa products. Under the earlier Cotonou regime and now the so-called Economic Partnership Agreements (EPAs), cocoa beans and cocoa products at all stages enter the European market duty- and quota-free. There is no tariff escalation that holds up processing. It would be different had Ghana, Côte d'Ivoire and Cameroon not signed their individual EPAs with the EU.

The alternative scenario can be seen in Nigeria, which has so far refused to sign an EPA and falls back on the EU General Scheme of Preferences (GSP). Nigeria now pays import duties on cocoa products (see the table below).⁴⁷ Interestingly, the EU import tariff is higher for cocoa paste than for butter and chocolate,

⁴⁷ The 'MFN rate' in the table shows the broader EU Most Favoured Nation treatment of imports into the European customs union.

so there is no proper 'escalation' either – an indication that European industry perceives import competition for cocoa paste as more critical than for downstream and final products.

Table: Selected EU import duties and Nigerian exports

	Exports volumes NG to EU (in T€ - average 2014-2016)	EU MFN rate	EU GSP rate	EPA rate
Frozen shrimps	42,082	12%	4.2%	0%
Coffee (beans)	300	0%	0%	0%
Coffee (roasted)	2	7.5%	2.6%	0%
Cocoa beans	399,747	0%	0%	0%
Cocoa butter	60,668	7.7%	4.2%	0%
Cocoa paste	8,131	9.6%	6.1%	0%
Chocolate	0	8.3%	4.8%	0%
Sauces, mixed condiments	485	7.7%	4.2%	0%
Natural gas	1,139,332	0%	0%	0%
Skins of sheep	46,810	0%	0%	0%
Leather	12,634	6.5%	6.5%	0%
Leather belts	0	5%	1.5%	0%
Single cotton yarn	2,210	4%	3.2%	0%
T-shirts	15	12%	9.6%	0%
Motor cars	521	10%	6.5%	0%

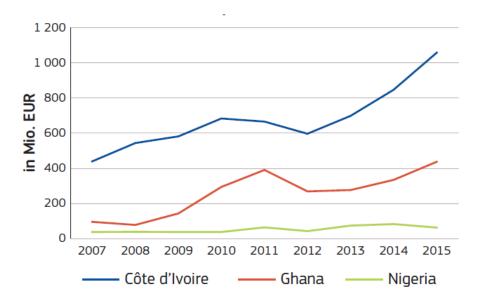
Source: European Commission, Technical Factsheet - Tariff liberalisation under the Economic Partnership Agreement (EPA) between West Africa and the European Union, Brussels 2017.

The true problem lies elsewhere. In West Africa, a joint 15-country ECOWAS-EPA was up for signature and ratification. It would have corresponded to ECOWAS as an emerging customs union. Nigeria and Gambia refused to sign the group agreement, after the late discovery that a free trade agreement with the EU might hold up their industrialisation. Because of this the Ghanaian and Ivorian governments felt compelled to accept individual interim EPAs in order to retain free access to the European market for their agrarian goods, including processed cocoa and coffee products. The resulting situation is an economic disaster for ECOWAS, now split into different trade entities, caused mainly by the EC but also by the manifest lack of strategic focus on the West African side.

Analysts from advocacy NGOs and IGOs have questioned the need for Ghana to sign the iEPA: Ghana's main exports – oil, gold and cocoa *beans* – are not in jeopardy in any case. Reverting to the GSP would only be critical if there were a broad range of industrial exports to Europe in the pipeline, possibly as a result of an orchestrated policy effort. There are none yet. Among all exports, processed cocoa products indeed benefit from duty-free access to the EU market, in contrast to Nigeria's, as the graph below shows.

⁴⁸ Ghana and Côte d'Ivoire are both Lower Middle-Income Countries (LMIC) which would also have reverted to the EU GSP, The same applies to Cameroon in Central Africa where no regional EPA is in sight. The background to this case is rather the free banana exports to the EU which the government has secured by signing the iEPA.

Graph: Export of cocoa products into the EU 28



Source: EC DG Trade communication on EPA advantages, 2017. Cocoa products comprise liquor/paste, butter, powder and chocolate.

Ivorian and Ghanaian exports of cocoa products to Europe have surged, in Ghana's case to about a fifth of the export value of cocoa beans, and now are undoubtedly benefiting from unlimited free market access under their iEPAs.⁴⁹ Yet in turn, massive government revenue losses from *import* liberalization under the EPAs are to be calculated, so both countries are paying a high price; and import surges of EU milk powder, for example, are more difficult (though not impossible) to contain under the iEPA, potentially disrupting local dairy markets.⁵⁰ The outcome is ambiguous and needs thorough reconsideration of the macroeconomic, social and fiscal balance of EPA costs and benefits, as can be figured out by Berthelot's up-to-date analysis. (Berthelot 2018)

With regard to regional economic integration in West Africa, the overall situation is clearly unsustainable for ECOWAS as a group and for Ghana herself. The problems discussed above would not even be eliminated if a return to the regional EPA became possible or if a re-examination of all EPAs is offered by the Europeans, as the coalition agreement for the new German government suggests. Considering agroindustrial policy options in line with the government's trade policy stance arguably would require far more and far better technical advice than is currently being delivered.

⁴⁹ However, there is an attribution problem: DG Trade ascribes the export surge to the working of EPAs. Throughout the period examined here, the iEPAs were not fully in force, and all West African states benefitted from an EU provisional duty-free market access regulation. The reality is likely to be the other way round: European and American cocoa companies active in the emerging export business must have bullied the GoG to have free EU access assured for the future and thus to ratify the iEPAs into full implementation.

⁵⁰ For an assessment of the EPA negotiation outcome with regard to the whole of Africa, see Asche (Asche 2016b).

Conclusion

'Ghana Cocoa' is a fascinating though mind-boggling subject. Even if there were no political economy or 'governance' problems within the sector, managing cocoa is a formidable technical and financial task not only for the hard-working farmers or the companies in the sector but for every government. In fact, it is startling to observe that the management of a seemingly simple tropical crop is hardly less complicated than many sophisticated sectoral issues in advanced economies. You would hardly expect any German, Dutch or British government of these days to run cocoa better. Meanwhile, cocoa family farming in Ghana is confronted with a protracted crisis threatening its very existence.

Given the global spotlight in which West Africa's cocoa has stood since the beginning of this century, the long list of analytical unknowns and grey areas is stunning and unhelpful for policy-makers, the company managers and advisers to the farmers who are trying to come to terms with the said complexities. The sector is not over-researched.

Now within the international community which supports sustainable cocoa farming there are calls to think "beyond certification". This is a fine word. However, in which direction will it take us? In IFPRI's analysis for Ghana:

"Ghanaian cocoa farmers may benefit more from improvements to the domestic management of the sector than from international schemes highly visible to consumers. Higher shares of prices offered by COCOBOD would have a greater impact on farmers than any of these schemes". (Op. cit.: 136)

The cornerstone is the problem of far too low farmgate prices (even including potential premiums) and the surrounding institutional opacity. International policy dialogue has to be focused on how to bring transparency into the system, as much as fair domestic prices along with better input provision. This would lead to another reform of COCOBOD as an institution. Yet it should not be pursued to the exclusion of the other avenue of search: how to reorganise global sourcing so as to double or triple the producer countries' margin on a bar of chocolate. The voluntary corporate commitments by the international cocoa, chocolate and retail companies to help transform the sector are therefore to be reviewed again.

Furthermore,⁵¹ visitors to cocoa farming communities witness other home-grown sustainability challenges: Uneven or lacking infrastructure development greatly impacts the farmers' wellbeing, and thus the sector's productivity. There are a few newly renovated primary schools and boreholes for clean and safe water here and there, along with a health station that might lack basic equipment, medication or even qualified health staff; all these kinds of well-meant private or public sector interventions, frequently donor-driven, might bring some 'first aid' relief to the beneficiaries. However, as long as national policies, the district development plans and diverse donor projects are far from coherent (a problem high-income countries also struggle with), one needs to ask: Who truly knows which region and which community requires what kind of intervention to improve farmers' livelihoods and communities' well-being? And for cocoa farming it has long been clear that

⁵¹ This section is informed by personal communication, Jörg Hilgers (EDP Association); 17 April 2019.

"much more needs to be done to help producers. But the issues that need to be tackled now, those of diversification, land reform, rural banking and scientific research lie beyond the remit of Fairtrade." (Ryan 2011: 118)

The implications for both agricultural aid and aid for trade (AfT) appear straightforward: projects of Good Agricultural Practice and AfT need to be far better combined with targeted policy dialogue and improved trade policy. Repeatedly aid *for* trade had to contend with its antonym: trade, *not* aid. Ghana's new president himself made a statement to exactly this effect, during a state visit to Berlin in February 2018. Yet trade requires good trade policy, informed by sound sector policy advice and technical assistance. This chain has yet to be adequately realised for 'Cocoa Ghana' as well as for other crops.

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