Bittersweet cocoa: certification programmes as battlegrounds for power, authority and legitimacy in Ghana

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Abstract

Critical studies on the interlinkages of access, power and sustainability in high value tropical commodity systems are gaining traction in the academic literature. This article draws on access theory to examine how the distributional effects of a private sector certification programme on rural cocoa growing communities are bound up in the power relations between the state, private sector actors and smallholders in Ghana. The article is based on a qualitative case study approach involving 40 semi-structured interviews, 20 in-depth interviews and field observations conducted between 2018 and 2021. We found that the private sector firm certification incentives such as premiums, agronomic inputs and technical services are distributed unevenly, and also contribute to increased production costs, theft, unjust gender relations, and labour exploitation. We argue that the certification programmes obfuscate the deteriorating relations between the state and the farmers and enable the private firms to gain foothold and affirm their operational legitimacy and market links with smallholders. We conclude that revising the certification programmes would require market and institutional reform. The revision also needs to take into account the existing structural differences among farmers, and between the state and the market for better sustainable transitions.

Key words: Cocoa, Access theory, Power relation, Legitimacy, Sustainability, Smallholder farmers

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Introduction

In response to the global demand for ethical cocoa, chocolate firms in recent decades have been operating certification programmes that serve as alternative forms of cocoa supply chain governance in Ghana (Krauss & Barrientos, 2021; Odijie, 2018; cf. Jaffee, 2007). At the same time, the state – via the Ghana Cocoa Board (COCOBOD) – exercises a large amount of power and control over the cocoa sector, where over 800,000 smallholder farmers operate. This article is concerned with how private sector cocoa certification programmes operate in the context of state power and control in Ghana. The main aim of the article is to illustrate how the distributional effects of a private sector certification programme on rural cocoa growing communities are bound up in the power relations between the state, private sector actors and smallholders in Ghana. We focus on what we see as a gap in the literature concerning the growth and increasing power of private sector cocoa certification schemes and the tensions that arise in an existing state institutional regulatory framework. In doing so, we address the uneven and unjust distributional effects of firm-led certification incentives, and the burdens of participation in such schemes (Lee et al., 2012; Newton et al., 2013; Lambin et al., 2018; Thorlakson et al., 2018; Neimark et al., 2019).

We make conceptual and empirical contributions in this article by using the theory of access (Ribot and Peluso 2003) to address critical questions regarding the rise of private-firm cocoa 'certification economy' (Neimark & Wilson, 2015). Firstly, we draw on access mechanisms—also conceived as bundle of powers—in access theory to discuss how smallholder farmers practically derive multiple benefits from certification incentives. Analytically, we discuss how the incentives are also associated with burdens – an issue sometimes left out in the studies of certification programmes. We argue that the private sector capitalises primarily on the inability of the state (through COCOBOD) to deliver incentives which benefit the smallholders. Secondly, we conceptualise and provide empirical evidence of how the state, the firm and other participants exercise power and control over the incentives in the certification system. For instance, we uncover how the firm uses the Farmer Cooperative Society to distribute premiums and agronomic inputs while the state parastatal, COCOBOD, adopts new surveillance system to monitor and control the operational activities of the certification programme. Lastly, we discuss and conclude on how the certification incentives and the associated benefits institute, secure and reinforce power, authority and legitimacy of the state, the firm and some participants in the certification system (Sikor & Lund 2009). Our concluding argument is that distinct from civil society-led certification schemes, both the benefits and burdens arising from the growing firm-led certification schemes are unjustly and unevenly distributed. With incentives being continuously embedded in power relations with state, smallholders and chocolate firms, tensions can arise. We start with the subsequent section, where certification in Ghana as alternative governance arrangement in the cocoa sector is introduced and discussed. Afterwards, we proceed to introduce the theory of access and discuss how it is conceptually and analytically useful for our study.

Certification in Ghana as an alternative form of cocoa value chain governance

In recent decades, certification has emerged as an important regulatory mechanism in the global agri-food system. This reflects significant broader shift from public to private sector governance arrangement with regards to the (re)organisation and transformation of production and labour practices, the provision of disciplinary measures for non-compliance of standards, food inspection, and consumer assurances about food safety (Busch, 2000; Hatanaka et al., 2005). In many agri-food sectors, firms adopt first-party certification, where they set and verify their own rules and standards. Some firms also operate third-party certification. With this, they impose production and labour standards of civil society groups like Fairtrade International and Rainforest Alliance on their suppliers, and allow different independent entities such as FLOCERT or AfriCert to monitor, verify and report the suppliers' compliance with the standards (see Gereffi et al., 2001; Perreault et al., 2015 for the various classification of certification i.e first, second, third, and fouth party certification). Previously, government agencies were mostly responsible for regulating food safety and quality standards. However, the "globalisation of the agri-food system, consolidation of food retail industry, the rise of private retailer standards" and ethical movements have caused this shift in power to firms, third-party certifiers and civil society organisations (Henson & Northen, 1998; Barrientos et al., 2001; Hatanaka et al., 2005, p. 355; Deaton et al., 2010).

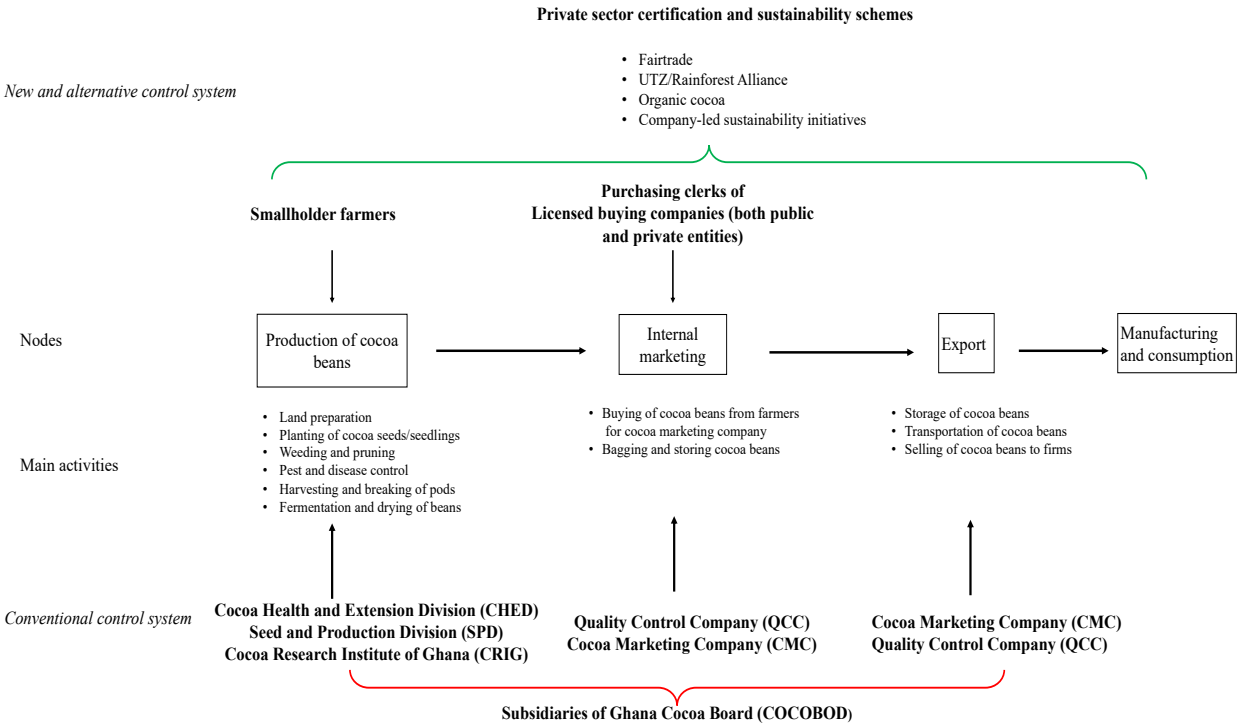
In Ghana, a similar shift in power can be observed in the cocoa supply chain (Laven, 2011; Laven & Boomsma, 2012; Glin et al., 2015; Bymolt et al., 2018). Ghana's cocoa sector had been under the control of the state parastatal, COCOBOD since the colonial period (Alence, 1990). The board has been responsible for the provision of agronomic advisory services to farmers, research and innovation diffusion, standardisation of agrochemicals, inputs and techniques of production, determination of farm gate prices, quality control of cocoa bean and internal and external trade of cocoa beans (Figure 1).

However, since the 2000s, chocolate firms relying on the Ghanaian cocoa supply chain have been operating certification programmes with third-party certifiers and civil society standards such as Fairtrade, Organic cocoa, UTZ, and Rainforest Alliance (Laven, 2011; Laven & Boomsma, 2012; Glin et al., 2015; Bymolt et al., 2018) (Figure 1). For instance, as of 2018, total certified cocoa fields in Ghana reached 1,143,610 hectares, combining those certified by UTZ (619,826 ha), Fairtrade (276,010 ha), Rainforest Alliance (239,074 ha) and Organic cocoa (8,700 ha), spanning over 280,000 smallholder farmers in many rural communities (Willer et al., 2019; Meier et al., 2020, https://standardsmap.org/en/trends).

The operations of cocoa certification programmes in Ghana tend to be collaborative arrangements between chocolate firms and standard bodies (Deans et al., 2017). Such private sector collaborative supply chain governance arrangements now parallel the conventional control system of COCOBOD. However, many chocolate firms are now dislodging from the partnership with the civil society standards to instate and operate their own in-house cocoa certification programmes (also called self-certification or accreditation) (Krauss & Barrientos, 2021).

This new institutional dynamic brought about by private sector actors in the cocoa sector of Ghana was driven by the global ethical concerns raised by consumers, civil society groups, politicians and the media about a host of supply chain issues, including, cocoa-induced deforestation, poverty, poor labour conditions, gender inequality, and child labour. Beyond sustainability challenges, firms were also facing a lack of technical innovation, lower crop yields, incidence of pests and diseases, and loss of soil fertility, which were posing an increasing threat to the supply of cocoa beans and jeopardising profits (Krauss & Krishnan, 2016; Krauss & Barrientos, 2021; Wessel & Quist-Wessel, 2015; Akrofi et al., 2015; Adomako & Adu-Ampomah, 2000; Mahrizal et al., 2014). Firms opt to join-up to either traditional third-party schemes or in-house certification programmes to protect their market legitimacy, and as demonstration of their corporate commitments to social, economic and environmental sustainability along the supply chain (Barrientos, 2014a; Tampe, 2018).

Figure 1: Ghana's cocoa supply chain and its control or regulatory system.



With certification, private sector firms are able to organise smallholder cocoa farmers in remote settings (Krauss & Barrientos 2021) and install "codes of conduct, production guidelines and monitoring standards" in order to govern and judge the products, production and labour practices of their suppliers (Gereffi et al., 2001, p. 56; Busch & Bingen, 2006; Loconto & Busch, 2010). Firms entice and enrol their suppliers in their certification programmes by providing them with incentives through farmer associations and cooperative societies (Jaffee 2008). The incentives may include various financial, social, material, productive support systems which are aimed to increase the capacities of suppliers to produce

sustainably and supply ethical cocoa beans to buyers (Laven & Boomsma, 2012; cf. Paschall & Seville, 2012).

However, studies on the impacts of certification have demonstrated that in many cases the incentives provided by firms offer different opportunities and problems to suppliers (Jaffee, 2007; Laven & Boomsma, 2012; Krauss, 2015). For instance, studies have discussed the socio-economic benefits of certification, such as strengthening local producer organisations, providing higher income returns for producers, and offering a better quality life (Ronchi, 2002; Milford, 2004; Calo & Wise, 2005; Bacon, 2005; Bacon et al., 2008; Jaffee, 2007). Certification schemes also provide producers with access to credit, education and training, improve the management of products and expand their production (Murray et al., 2003; Taylor, 2005; Becchetti & Costantino, 2008).

Certification programmes can also ameliorate problems of gender inequality characteristic in the value chain of many commodities (Barrientos, 2019, 2014a, 2014b; Barrientos et al., 2013; Barrientos, 2013; Dunaway, 2013). Meemken & Qaim (2018) for example found that sustainable certification standards such as Fairtrade and UTZ increase wealth in both male and female-headed households and alter intra-household distribution of asset ownership especially in male-headed households in the coffee landscape of Uganda. Additionally, certification schemes produce some environmentally positive outcomes (Giuliani et al., 2017). For example, Blackman & Naranjo (2012) found that organic coffee certification reduces the application of chemical inputs and increases farmers' adoption of some environmentally friendly farm management practices in Costa Rica. Moreover, in Ethiopia, forest coffee area under certification increases the possibility of forest conservation compared to uncertified areas (Takahashi & Todo, 2014).

On the contrary, research on the impacts of certification schemes also shows that there are bittersweet aspects to certification schemes (Vanderhaegen et al., 2018). For instance, Fairtrade organic coffee producers in Nicaragua and Mexico achieve better yields but are burdened with high labour cost. As a result, most farmers remained in poverty despite increase in yields and income levels (Barham, 2002; Bacon et al., 2008; Valkila, 2009; Valkila & Nygren, 2010). Snider et al. (2017) argue that while a certification scheme provides non-financial benefits to both farmers and cooperatives, low market demand for certified coffee, poor price incentives and high auditing and management costs undermine full participation of the entire membership of the farmer cooperatives in Costa Rica. Furthermore, LeBaron & Gore (2020) found that despite the operation of certification in some cocoa producing regions in Ghana, labour exploitations, forced labour and gender inequality still persist. Again, in the cocoa sector of Cote d'Ivoire, cooperative workers receive better improved wages than the Fairtrade farm workers (Meemken et al., 2019; Meemken, 2020). These differential effects of certification programmes are also visible among coffee producers in Mexico (Jaffee, 2007).

Three patterns of power struggle underlie the divergent effects of certification. Firstly, there has been increasing competition among private sector firms over the use of certification to demonstrate the legitimacy of their corporate market operations (Elgert, 2012). Secondly, it has

emerged that private sector firms are changing their terms of engagement and operations with the civil society standard-setters (Krauss & Barrientos, 2021). Lastly, there is rising attempt by governments or state agencies to control certification operations, so that they do not displace conventional state-control systems (Klooster, 2006, 2010; Glin et al., 2015). The power struggles in the certification systems are mostly influenced by differential interests, struggles for gains, values and ideologies of those promoting and implementing certifications (Elgert, 2012; Beder, 1996). They are also shaped by the mistrust in the global market economy (Loconto & Busch, 2010; Busch & Bingen, 2006).

These power dynamics can affect the potentials of firms to offer sustainable solutions to supply chain problems (Klooster, 2006, 2010). For instance, in late 2019, the governments of both Ghana and Cote d'Ivoire threatened to halt all private sector certification programmes, and subsequently suspended the certification programmes of some private sector firms which failed to pay the new Living Income Differential (LID), a USD 400 premium to cocoa farmers introduced by both countries (see also: Dontoh et al., 2019; Bassompierre & Jha, 2019)[1]. The suspension deprived farmers of certification incentives and benefits (Mieu, 2020; Nieburg, 2019).

Power struggles can also lead to the unravelling of partnerships among participants in the operations of certification programmes (Krauss & Barrientos, 2021). For example, since 2017, Mondelez International, which led the Cocoa Life third-party certification programme in Ghana, has stopped collaborating with Fairtrade as a standard-setter and FLOCERT as a third-party certifier. The firm now operates their own certification programme (Interview with a cooperative worker, 2021). According to a cooperative worker of Asunafo-North Municipal Cooperative Cocoa Farmers and Marketing Union Limited —a Fairtrade certified Farmer Cooperative Society, Mondelez International buys ethical cocoa beans from their farmers based on its own market terms and conditions rather than Fairtrade's minimum price and premium payment arrangement. Despite the firm's change of partnership, the cooperative society still works with Fairtrade and FLOCERT (Interview with a cooperative worker, 2021).

Rarely addressed in most of the impact studies of certification is how the distribution of benefits and burdens are shaped by power dynamics and tensions between the state, firms and smallholders in certification systems (Lee et al., 2012; Newton et al., 2013; Lambin et al., 2018; Thorlakson et al., 2018; Neimark et al., 2019). This article addresses this gap with a focus on Mondelez International's cocoa certification programme. Our concern is not about the changing power dynamics and engagement in the certification system (cf. Krauss & Barrientos, 2021), thus a shift in the relationship between Mondelez International, Fairtrade and FLOCERT. Rather, our interest lies on the less studied distributional effects of the certification incentives and illustrating their close association with the power relations between COCOBOD, the firm and the smallholders. Our analysis and arguments of the study cover the

[1] https://www.bloomberg.com/news/articles/2019-10-18/against-the-tide-cocoa-growers-plan-to-suspend-ethical-programs

period of both before and after the dissolution of the certification partnership between Mondelez International, Fairtrade and FLOCERT.

Conceptualizing certification incentives as access mechanisms

This article builds on the theory of access developed by Ribot & Peluso (2003) as a conceptual tool to analyse the certification incentives as mechanisms for the distribution of benefits and burdens. Access theory also enables us to unpack the complex power relations between COCOBOD, the private sector and smallholder farmers that characterise the certification incentives in Ghana. A key aspect of access theory is its focus on how powerful actors access benefits in natural resource commodity chains (Ribot & Peluso, 2003; Ribot, 1998) and the differential power and social relations which influence the derivation, control and maintenance of benefits (Ribot & Peluso, 2003; Myers & Hansen, 2020; Peluso & Ribot, 2020). The theorisation of access by Ribot & Peluso (2003) is built on ideas of property and relations of production from Marxian political economy (Myers & Hansen, 2020). Their notion of access, which is also understood as power, is defined as the *ability* of actors to benefit from things (Ribot & Peluso, 2003; Myers & Hansen, 2020; Peluso & Ribot, 2020). This definition is useful because it goes beyond the narrower view of property as simply the *right* to benefit from things (Macpherson, 1978).

Central to the theory of access is Ribot and Peluso's use of Ashraf Ghani's phrase (1995, p. 2) 'bundle of powers', adapted from earlier property theorists' concept of a 'bundle of rights'. Ribot and Peluso expand the 'bundle of powers' concept further, showing that power is exercised and benefits are derived not only through property rights but also through structural and social relational factors (i.e. access mechanisms) such as technology, knowledge, capital, market, labour and labour opportunities, social identity and authority (Ribot & Peluso, 2003).

Ribot & Peluso conceptualise that access mechanisms must be understood within the political-economic framework because some actors command and control access, while others maintain access to shape how people gain benefits. Actors control access by mediating the access of others such as checking, directing or regulating the functions or powers of others (Rangan, 1997). Access is maintained when actors expend or distribute resources or powers to keep the supply of benefits (Berry, 1993).

We apply access theory to consider how certification incentives serve as access mechanisms from which smallholders derive range of benefits as well as burdens (Ribot & Peluso, 2003; Myers & Hansen, 2020; Peluso & Ribot, 2020). Access theory also enables us to investigate the distribution of certification incentives as powers exercised by private sector firms within the power and authority framework of COCOBOD, including provision of agronomic advisory services to farmers, research and innovation diffusion, standardisation of agrochemicals, inputs and techniques of production, determination of farm gate prices, quality control of cocoa bean and internal and external trade of cocoa beans (Kolavalli & Vigneri, 2011; Laven & Boomsma, 2012; Bymolt et al., 2018).

Ribot and Peluso suggest that the analysis of access should first involve identifying the benefit flows; second, outlining the mechanisms through which individuals or group of people attain the benefits; and third, understanding how the access mechanisms are structured by power relations within the political-economic context. This third level of analysis is further theorised by Sikor & Lund (2009). Among other arguments, they emphasise that analysis of access should not exclusively be reduced to distribution of gains (i.e., who benefits and who loses)[2]. Rather, analysis of access should also focus on how access to resources or benefits (re)constitutes or establishes *power*—the ability to control and influence others; *authority*—the power or rights to order, enforce and make decisions; and *legitimacy*—the right and acceptance to exercise power. This is because access can be structured or mediated by power, authority and legitimacy in societies. In the process, power, authority and legitimacy of actors and institutions are instituted, secured or reinforced to mediate and control access (Sikor & Lund, 2009, 2010).

Similarly, the present article builds on the three analytical levels of the access theory. Firstly, the theory enables us to examine the incentives provided via the certification programme as access mechanisms (bundle of powers) through which certified cocoa farmers obtain a range of benefits. We expand the notion of benefits in the cocoa commodity chains beyond commercialised profits to a host of other forms of beneficial gains. We also extend our analysis to include various burdens associated with the certification incentives.

Moreover, we go beyond the "bundle of powers" to investigate power as the ability of an actor(s) to influence the actions, activities and thought of others (Svarstad et al., 2018; Kirst, 2020). This reflects what Lukes (2005) calls the "third dimension of power." We argue that the certification incentives are mobilised by a private sector chocolate firm to influence and recruit thousands of smallholders to adopt sustainable production practises. This is because of the growing market for ethical cocoa (Meier et al., 2020) and the firm's desire to appropriate market benefits. Also, the provision of certification incentives by the firm has been possible because COCOBOD has been less active in addressing the agronomic, technical, innovation, input, market, or other needs of smallholders. This power exercised by the firm glosses over the power relations between COCOBOD and smallholder, and circumvents what is often seen as a problematic state agency (cf. Ferguson, 1994; Hope, 2020).

Secondly, the theory provides a useful lens to understand how the power relations between COCOBOD and private actors construct and shape the incentivisation mechanisms of the certification programme. Basically, we are keen to understand how the different participants shape the incentives embedded in the certification system. For instance, we stress that it is COCOBOD that grants formal access rights to the firm and the partners of the certification system to execute the programme and address the needs of the farmers through the incentives. Afterwards, COCOBOD controls and regulates the incentivisation mechanisms of the firm's

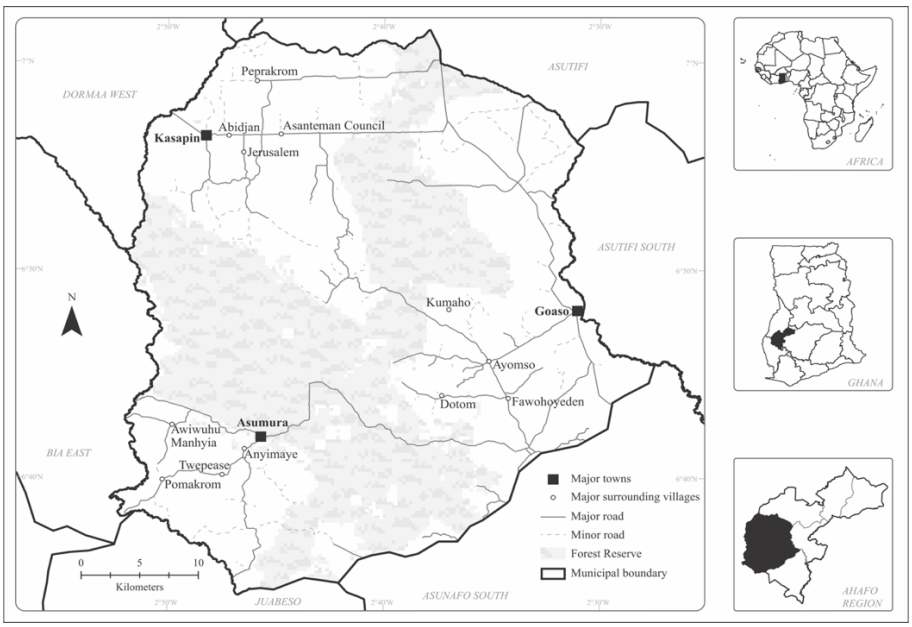
[2] Sikor & Lund (2009, p.2), note that "…it is equally important to investigate how polities emerge, consolidate and recede through processes of legitimization, inclusion, exclusion and violence."

certification programme. The powers exercised by COCOBOD secure legitimacy and authority for itself and the actors involved in the certification systems (cf. Glin et al., 2015).

Lastly, we link this second analytical aspect to Sikor and Lund's (2009, 2010) arguments on how access can (re)constitute power, authority and legitimacy. They argue that actors or institutions that often grant access to others to officially own resources or operate in certain environment would eventually after a continuous considerable period be recognised as actors or institutions with the authority to exercise such powers (Sikor & Lund 2009, 2010).

Likewise, we discuss how the private sector firm and other actors such as Fairtrade, FLOCERT and the Cooperative Society in the certification system are granted formal rights and authoritative recognition by COCOBOD to provide agronomic, technical, innovation, input, and market services to smallholders, and also to monitor and verify their production and labour practises. In doing this, COCOBOD reiterates the formal power and authority to scrutinize and regulate the operations of the certification programme. However, our argument goes beyond how the board secures and maintains its regulatory authority and powers over the certification programme (cf. Sikor & Lund, 2009, 2010). What is new is how the smallholders' acceptability of and reliance on certification incentives further reinforce the powers of the firm, Fairtrade, FLOCERT and the Farmer Cooperative Society to influence the production and labour practises of smallholders, establish production and market relation with farmers for the supply of ethical cocoa beans. The use of the theory of access for our case study enables us to understand that the certification incentives and their corresponding distributional effects always operate in the context of power exercised by some actors. At the same time, power as well as legitimacy of the actors are diffused through the incentives.

Figure 2: Map of Asunafo-North municipality showing various villages and towns used as study sites



Context, research design and methods

The analysis and discussion of the distributional effects of the certification incentives and their connection with power, authority and legitimacy were based on a case study undertaken between 2018 and 2021. The case study approach permitted us to explore and provide in-depth understanding of the certification programme and how it was situated in its context (Yin, 2012) by using qualitative data collection and analysis techniques (Stake, 1995).

The study was undertaken in Asunafo-North Municipality, one of the major cocoa-growing regions in Ghana. It is located in south-western Ghana, about 200 km north-west of Accra (Figure 2). In the municipal region, we focused on Asunafo-North Municipal Cooperative Cocoa Farmers and Marketing Union Limited. The program started in 2012, and it built on the Cadbury Cocoa Partnership programme which was launched in 2008. Under the Cocoa Life Program, Mondelez International was collaborating with Fairtrade International (an independent standard-setter), FLOCERT (a third-party certifier) and Asunafo-North Municipal Cooperative Cocoa Farmers and Marketing Union Limited (a Fairtrade certified Farmer Cooperative Society).

Many certification programmes were operating in Asunafo North. So, selecting Cocoa Life Program (and its cooperative society) as a truly representative case was not an easy task (Seawright & Gerring, 2008). Inspired by Seawright & Gerring (2008)'s discussion and categorisation of case selection techniques, a typical case selection technique was used to choose a private sector certification programme. With a typical case selection technique, the idea was to choose a certification programme that illustrates what is typical, normal and average to understand (Patton, 1990, 2014). Prior to the case study research, data on the different private sector certification schemes operating in the municipality as well as their main operational objectives, coverage and membership were obtained from technical reports, websites and officials of COCOBOD. Subsequently, criteria were outlined to select a programme that would be a typical or representative of all the certification programmes in Asunafo-North.

The first criterion was to look out for certification programme whose operational objectives holistically cover the social, economic, and environmental aspect of cocoa farming (e.g., increase in household income, reduction of poverty, eliminating child labour, gender empowerment, forest conservation, etc.,). The second was to consider the coverage of the certification programme in terms of the number of villages or communities within which it operated. The third was to consider and choose a certification programme that has the largest membership of certified smallholders in the region.

Based on these criteria, Mondelez's Cocoa Life Program was selected instead of programmes such as Cocoa Abrabopa's certification, Barry Callebaut's Cocoa Horizon program (Cocoa Nyonkopa), Touton/Solidaridad/UTZ and Rainforest Alliance certification etc. The Asunafo-North Municipal Cooperative Cocoa Farmers and Marketing Union Limited is the only farmer

cooperative society in the region, which has been working under the Cocoa Life Program. It has a membership of over 5000 certified farmers in 67 rural communities. The certification programme holistically focuses on three areas: (1) to promote sustainable cocoa farming businesses; (2) to empower cocoa communities; and (3) to conserve and restore forests[3]. Selecting this programme would provide in-depth understanding and theoretical discussion of certification incentives. Comparatively, the other certification programmes operate with smaller farmer groups in few villages and they either focused on socio-economic or environmental dimension of cocoa certification.

Table 1: List of methods and participants

Data collection technique	Sample size	Respondents
Semi-structured interviews	4	Cooperative workers
	12	Certified female farmers
	24	Certified male farmers
In-depth interviews	7	Certified male farmers
	4	Certified female farmers
	4	Cooperative male workers
	1	Cooperative female worker
	2	Officials of Cocoa Health and Extension Division
	1	Official of Seed Production Division
	1	Official of Forestry Commission*

*An in-depth interview was conducted with an official of the Forestry Commission after some initial findings about forest tree conservation on cocoa farms were uncovered from the certified farmers.

A total of 60 respondents were randomly selected for semi-structured interviews and in-depth interviews (Table 1). In addition to the interviews, participant observation was carried out during the distribution of premiums, communal meetings, training and educational programmes for the certified farmers. The semi-structured and in-depth interviews were conducted in the form of face-to-face interaction on farms, at the houses and offices of the respondents. Our interview questions focused on how the certification programme is operated, what benefit(s) farmers obtain from the certification, and through what means? The perspectives and the roles of the state bodies with respect to the certification programme were also explored. Additional data were obtained from the documents of the Farmer cooperative society, website of the Mondelez International, and the media such as Bloomberg, Financial Times, Confectionery News, and the Cocoa Post. Data were analysed using descriptive and thematic analysis techniques. Additionally, we deployed pattern-matching analytical techniques which involved comparing the data collected with propositions informed by the access theory (Yin, 2012).

[3] https://www.cocoalife.org/

Certification incentives as mechanisms for benefits and burdens

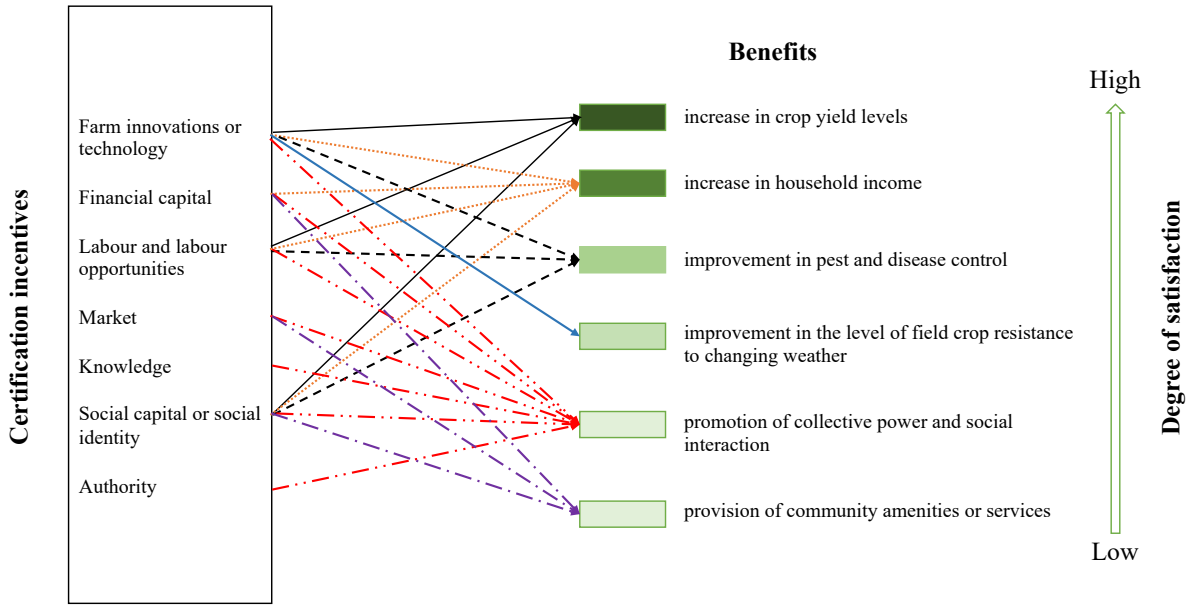
The private sector firm provides certification incentives to the certified smallholders to influence their production and labour practises. The incentives touch on many of the structural and relational mechanisms which Ribot and Peluso's (2003) conceptualised as bundle of powers in access theory, and they include elements as diverse as technology or innovations, knowledge, financial capital, market, labour opportunities, authority, social capital and identity (Table 1). Through these certification incentives, smallholders derive six benefits, namely: (1) increase in crop yield levels, (2) increase in household income, (3) improvement in pest and disease control, (4) improvement in the level of field crop resistance to changing weather, (5) promotion of collective power and social interaction and (6) provision of community amenities or services (Figure 3). Addressed below are how the certification incentives provided by the firm serve as access mechanisms for the distribution of benefits and burdens. Also discussed are how the incentives conceal the state’s poor and unsuccessful relations with farmers.

Table 2: Illustrated in this table are the incentives provided by the certification programme and the specific benefits the farmers derive from them.

Certification incentives	Specific examples	Mode of facilitation
Farm innovation or technology	• hybrid cocoa seedlings • integrated pest and disease management techniques • row and wide spaced planting technique • pruning ideas and techniques • cocoa agroforestry techniques with native trees	Education, training and field demonstrations by technical experts
	• synthetic fertilizer • organic fertilizer like poultry manure, husk of cocoa pods • pruning and spraying machines	Recommended by technical experts but purchased by farmers
	• pesticides • biostimulant	Free distribution as percentage part of farmers' premium
Labour and labour opportunities	• skill development and improvement • agronomic assistance from technical experts	Education, training and field demonstrations by technical experts
	• trained local youth	Through premium development plan where a percentage of money is allocated to train local youth and finance their services
Financial incentives	• cash to supplement household income • cash to finance community development projects	Premium
	• medical screening	

		The cooperative union internal fund through its premium development plan
	• scholarships	
	• Financial facility for savings and loan acquisition	Cooperative union mutual loan scheme
Market	• US$ 2400 minimum price per metric tonnes for Fairtrade certified cocoa produced • US$ 240 premium price (bonus) per metric tonnes for Fairtrade certified cocoa produced	Record keeping and declaration of cocoa output by farmers every year
Knowledge	• Facts and information on cocoa physiology, pest and disease infestation process and its management through timely weeding, pruning and application of standardised pesticides. • Labour safety and protection information • Knowledge on child protection, child education and development • Information on cocoa agroforestry and environmental protection • Additional knowledge and skills in other alternative areas of livelihoods	Education, training and field demonstrations by technical experts and the management team, and Communication and sharing of farming experience among farmers
Social capital or identity	• Exchange of knowledge, inputs, labour and other resources	Farmer associations and their frequent meetings and discussions Leadership of the farmer organization
Authority	• Self-government or independence • Level of autonomy or political empowerment	The formation of cocoa farmers' cooperative societies and their leadership, Certification and licensing of the farmer organization by both Fairtrade International and Department of cooperatives in Ghana

Figure 3: The relationship between the incentives and the benefits. The figure illustrates the incentives and the associated benefits obtained by the smallholder cocoa farmers under the certification scheme. It also shows how farmers rank these benefits in order of satisfaction. Of note, these benefits are not mutually independent. Most of these benefits result in higher yields.



Farm innovation or technology

One of the key groups of certification incentives from which the certified smallholders derive benefits is the various agronomic innovations, inputs, and technologies. These are provided by the private actors to relieve farmers from the burden of lower crop yield, unsustainable income, pests, diseases and bad weather which the state has constantly failed to resolve. For example, the state policy intervention on free distribution of synthetic fertiliser in 2013/2014 was less successful when fertilisers were distributed along political affiliations, and corrupt people hoarded and sold fertilisers for money (Laary, 2015; Bigg, 2017), a claim also confirmed by a sub-chief who doubles as a farmer in one village. Also, many farmers claimed that they were reluctant to participate in the cocoa rehabilitation and replanting programme (which started in 2011) because of the state failure to provide compensation and supply inputs such as hybrid cocoa seedlings and agrochemicals to some farmers who rehabilitated their farms by cutting down aged or diseased cocoa trees (Oppong, 2015).

Under the certification programme, the private sector firm intervenes and supplies smallholders directly with agrochemicals, implements, seedlings and agronomic ideas, among other things. Access to these incentives are also provided to the farmers through the technical experts of the cooperative society and Agro-Eco Louis Bolk institute, an independent private advisory organisation whose services are funded by the private firm. For example, according

to an executive of the farmer cooperative society, more than 400,000 hybrid cocoa seedlings were raised and distributed freely to farmers with the support of the technical experts of the cooperative society and Agro-Eco Louis Bolk institute. Also, the experts use education, training and field demonstrations to promote sustainable farm management practices known as Good Agricultural Practices. Moreover, farmers themselves could use their premium paid by the private firm to finance their agronomic inputs and services.

However, these ideas and inputs are shrouded with burdens, especially on women. In many cocoa growing rural communities, traditional norms relegate women to a subordinate position which affect their fair share of resources and income (Barrientos, 2019). Despite such social misrecognition and marginalisation, women in many households have been trying to be resilient by engaging in other forms of livelihoods (Leach et al., 1999). However, certification incentives in the form of farm innovations and technologies that are expected to empower both men and women, equally and equitably, rather pose adverse impacts on the social adaptative strategies of women. For instance, the agronomic advice by the technical experts to the certified farmers to use cocoa husks to replenish on-farm soil affects women who previously used these wastes to make soap. Similarly, frequent application of pesticides affects other crops in the cocoa farms. For instance, it retards the growth of mushrooms and contaminates cocoyam leaves, affecting women who harvest these crops for sale and as food. A 'chief farmer'[4] in a village articulated that:

> Crops such as yam and cocoyam are mostly affected when we apply these agrochemicals. If you do not have spare land on which you plant these food crops, then you and your family will be in trouble….. Even nowadays, the women do not get the mushrooms as it used to be. I think the termites and other organisms that help to produce these mushrooms are killed when we apply these agrochemicals. If I am applying these agrochemicals alone on my farm, I know the spots where the mushrooms grow so I do control myself well. But if you seek for communal help, nobody will recognise them, and these spots will be infected.

This evidence resonates with the discussion on how innovation and technology continue to perpetuate gender inequality in the rural agriculture sector of most parts of Africa and Asia (Agarwal, 2015). Often, such social exclusion in the economy depends of how, and the extent to which cultural norms and traditions differentiate groups or classes in societies (Agarwal, 2015). This stresses the point that interventions that fail to recognise uneven power or structural differentials undermine the ability of the disadvantaged social groups to mobilise resources to make a living (Leach et al., 1999; McCusker and Carr, 2006).

Another burden is high production and labour costs for the certified farmers associated with the adoption of the row and wide spacing planting technique and hybrid cocoa seedlings. Replanting hybrid cocoa seedlings in old land use fields using the row and wide spacing

[4] A chief farmer is the person who is awarded and generally recognised by farmers and the residents in a village or community as the best and most hardworking farmer.

planting technique requires additional labour for clearing weeds and the application of fertilisers, pesticides and fungicides to improve soil fertility and increase survival rate (cf. Amanor et al., 2020). Where labour is unavailable, the growth and survival of the hybrid cocoa seedlings are affected, for instance sometimes leading to delayed crop maturity. Whilst farmers battle with such production and labour burdens, they claim that the inputs they receive as incentives are insufficient. For instance, a farmer indicated that:

> Yes, pesticides and those ideas are now available, but they are not sufficient. Nowadays, the infection rate is high. If you are not careful all your pods will be destroyed, and you will get nothing. Those insects are dangerous, and you always need to constantly apply pesticides. About 3 or 5 bottles of pesticides cannot be enough for the whole year.

The manager of the farmer cooperative society stressed that, 'the premium cannot cover all the things farmers need' even though there is high demand for pesticides and bio-stimulants by farmers. As a result, even more expensive implements like pruning and spraying machines are often procured collectively by some farmers.

Labour opportunities

The certification programme, moreover, provides labour opportunities for the certified smallholder farmers. Agronomic technical training, educational programme, material and human resources are provided to upgrade farmer labour skills, improve labour safety and health conditions, and enhance access to technical assistantship. Over the years, COCOBOD has had limited capacity to recruit enough agronomic extension officers to provide agronomic services to farmers. Most certified farmers claim that they do not receive any form of support from the agronomic extension officers of the board despite having their offices and infrastructures located in the municipality. Labour related incentives provided by the private actors aim to tackle the problems of aged farmers, rural-urban migration, lower income, poor working conditions that have long been overlooked by the state (Löwe, 2017). Labour incentives are facilitated either by the farmers' annual premium development plan or the lead company's agronomic experts. In the former case, a percentage of the farmers' premium is allocated to train local youth or hire additional experts to undertake farm management activities and to train the certified farmers. This means in order for farmers to meet the production and product standards of the private sector, they must reinvest their own labour and the premium they receive in their farms to (re)produce cocoa beans for the global chocolate industry.

Whilst the certification scheme requires additional labour to produce more cocoa, local labour relations make this a challenge. Much cocoa is managed by 'caretakers', people employed by absentee and aged farmers to manage cocoa farms, and in return obtain half or one-third of the cocoa output. Due to lack of financial capital and their informal labour contract arrangement, caretakers are in no position to hire by-day labour or task-based labour. Additionally, the focus on yield increase for higher premium under the scheme causes increasing demands on family labour; essentially women in areas of planting and maintenance care of young cocoa plants, fetching water for pesticides application, gathering and breaking of cocoa pods,

carrying, fermenting and drying of cocoa beans (cf. Agyare-Kwabi, 2009). But added labour hours required by the scheme result in different distributional effects among household members (Jaffee, 2007; Mutersbaugh, 2009). This is because as a result of dominant social norms associated with the gendered division of labour and land tenureship regimes, women largely serve as unpaid family labour on smallholder farms (cf Barrientos, 2014), whereas men generally control household income (cf. Myers, 2020; Sayid, 2020). In cases where women have ownership rights in cocoa farms, they tend to depend more heavily on hired labour than men (Barrientos, 2014). These unequal gendered labour relations (LeBaron & Gore, 2020) become unjustly entrenched in the event of additional labour requirements for yield growth under cocoa 'sustainability' schemes.

Knowledge

The certification programme also incentivises farmers with knowledge that pertains to the better ways of producing ethical cocoa beans for the firm. While farmers are often ill-informed about agronomic services and standardised practices by the state (cf. Löwe, 2017), private actors have successfully exposed farmers to information or knowledge about opportunities, risk, labour, production and the market standards (see table 1). Information flows are communicated through education and training programs, and in some cases through the internal verification system of the farmer cooperative society. The external third-party verification and certification process undertaken by FLOCERT also serve as medium of information flow to the farmers. However, the farmer cooperative society still needs to disburse funds from their premium to finance the cost of information delivery. For instance, in the premium development plan of the Asunafo North Cooperative Society, a total of USD 23,080 is allocated for educational and training courses for members to attain knowledge on climate change adaptation measures, labour issues, Fairtrade standards, leadership and governance for the 2020-2021 operational year.

Access to information about labour requirements, safety and health precautions, production practices and market specificity of premium cocoa are influenced by gender, literacy and household size. Existing gendered labour traditions see men as the repository of knowledge and information about cocoa farming. This is because cocoa farming in Ghana has historically been dominated by men, with women and other household members in supporting roles. Certain types of labour practices associated with cocoa farming, such as forest clearance or cutting down of large and tall trees, are the factors among others that explain male dominance in cocoa farming (Amanor, 2001; Amanor-Wilks, 2009; Hill, 1963; Wilson, 1990). While female cocoa farmers in the certification programme are provided with information on sustainable cocoa production, the existing gendered tradition compelled them to rely on hired labour or their male counterparts for certain tedious tasks such as pruning[5], pesticide

[5] Pruning usually involves using climbing ladders to remove diseased pods and branches from the cocoa trees often with cutlasses. It also includes cutting down some cocoa trees to minimise tree crop density, to provide

application, weeding on farm and carrying of cocoa beans to the sale points. Most of these works undertaken by hired labour are not supervised by the women, and often do not follow sustainability practices. This lack of supervision is a result of house management responsibilities of women and their engagement in non-cocoa production ventures such as trading to support household economic and social needs. This supports LeBaron & Gore (2020) recent finding that dominant gendered labour relations, norms and values do not permit women to benefit from cocoa farming in Ghana.

Literate cocoa farmers are observed to be earlier adopters of new farm innovations and compliers with Fairtrade standards in comparison to illiterate farmers, due to their abilities to access information quickly. But through 'farmer to farmer' approach or 'train-the-trainers approach' (also Ansah et al., 2020 p.68) literate farmers convey certification information to illiterate farmers. Also, relatively larger households better divide labour among family members to enable them access information. For instance, based on the cooperative society's regular adherence to Fairtrade standards, an 18-year-old man was permitted to attend an educational training programme on behalf of his parents who were respectively undertaking cocoa fermentation and childcare duties. While household size influences access to information and production practices (cf. Chayanov, 1986), burdens such as higher labour cost, disease and pest infestation are disproportionately found among female-headed, single households and illiterate farmers. This is because of their limited abilities to access sustainable cocoa production information.

Social capital, institutional power and authority

The farmer cooperative society established by the certification scheme provides farmers with institutional power, self-government and authority, which has been denied by the state for a very long time. The independence and authority that the cooperative society gains promote the use of collective power and facilitate social interaction. Collective decisions and community development initiatives are taken by the farmers themselves with less dependence on the local authority or the state. Linked with this institutionalised farmer collectivism is the close support network among the certified farmers that facilitates the exchange of knowledge, information, inputs and communal labour for community development projects. Access to certain needs are usually facilitated through the leadership of the farmer organization. For example, in relation to artificial pollination, a state initiated agronomic programme hampered by the state's lack of capacity to recruit and employ pollinators, a farmer asserted that:

> '……It was really difficult to get these pollinators. A lot of farmers here needed their services. Whenever I go to them, they tell me they are fully booked. So, I informed chairman about it and I eventually got their services'.

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appropriate spacing, to encourage aeration and higher yields, and to avoid excessive moisture that causes black pod disease and breeds some pests.

Additionally, farmer collectivism promoted by the private sector has enabled them to fight the activities of illegal loggers who often cause damage to their farms. Over the years, the state has been less able to address illegal logging in cocoa farms. As a result, some farmers resort to vigilante justice and the threat of violence as means to protect their farms from the illegal loggers. According to a farmer,

> As soon as you see some marks and numbers on trees in your farms, then you must alert other farmers. If not, they will destroy your field crops without getting any form of benefits or compensation….. They mostly produce some fake documents as evidence of their concession….. Because we have been preventing them in the day, those thieves now operate at night.

This self-organized protection is an adaptation mechanism by the farmers made possible as a result of the certification programme. Farmers' responses to the illegal loggers speak to their moral obligation to defend their subsistence rights and justices in times of state's failure (Scott, 1976, p. vii; 1985). This resonates with the organised patrols, shared security arrangement and vigilante justice in Malagasy vanilla production systems due to the private sector market intervention programmes (Neimark et al., 2019). Such vigilantism should not exclusively be regarded as the absence of the state in dealing with the intruders but also it is because farmers are encouraged to protect and conserve trees under the certification programme in order to continuously receive premium on the cocoa they produce. As indicated by one farmer:

> 'We are told to protect the crops and the trees, and we would get premium for doing that. But this is an extra work and sometimes it is very risky to deal with these illegal loggers. Just imagine fighting these criminals at night'.

Such vigilantism aided and abetted by the certification programmes reflects similar efforts around the world by rural farmers to protect their resources and livelihoods (Neimark et al., 2019; Li, 2007).

Financial incentives

The sustainability scheme moreover incentivises farmers with cash benefits. These financial bonuses, received as a percentage of the premium paid for certified cocoa beans, supplement the household income of the farmers and finance community development projects and scholarships which the state has failed to deliver. COCOBOD funds and facilitates what is called cocoa infrastructure projects in Ghana. However, they are mostly road projects, neglecting other urgent needs of farmers. The private sector through the certification programme, comes in to directly support farmers with financial capital to construct community infrastructure projects. For example, the Asunafo North Cooperative Society's premium development plan for 2020-2021 allocates 33 per cent of the premium for the distribution of cash bonus to farmers, 5 per cent for the establishment of social infrastructure and challenge fund, 12 per cent for community development, and 4 per cent for scholarships for needy students. The premium is also used to finance the costs of monitoring systems, verification arrangements, and governance (see Mutersbaugh, 2002 for similar finding in

Mexican coffee production system). For example, in 2020, the cooperative society used about 19.5 per cent of its premium to finance the cost of certain administrative and certification activities (Table 3 below). This indicates that even though the premium drives farmers' participation, it benefits the corporation and certifiers more than the farmers, as a significant part of it is used to finance these costs.

Table 3: How the Farmer Cooperative Society uses a portion of the financial incentives (the premium) earned by farmers under the Fairtrade certification program. Farmers receive 80.5% of the premium, the rest is allocated to cooperative activities as noted in the table**.**

Action	Activities	Objectives	Responsible person(s)
Use 5% of the premium for payment of certification fee for 2020 and membership dues	Use the fund for payment of membership dues and certification fees	To help the union maintain its Fairtrade certificate	Union Executives and Union Manager
	3% for salaries and allowance	To motivate and strengthen the capacity of the workforce	Union Executives, premium committee and manager
	2.7% of the amount on fuel and other related vehicle issues	To facilitate an effective management and monitoring	Union Executives, premium committee and manager
	2% of the amount for stationaries and other office equipment	To facilitate and strengthen records management at the union	Premium Committee and manager
Set aside 14.5% of the premium for union administration	1.5% of the allocated amount of the premium for AGM of the union	To enhance accountability and participation among stakeholders and members. To approve budget and Fairtrade Premium Development plan	Union Manager and Executives
	1% of the amount for official duties and travelling allowances and charges	To meet some important engagement between the union and stakeholders both local and international	Union Executives and premium committee
	1.8% of the premium to train and support society managers and Technical officers (TO) to update membership register	To ensure that membership register is regularly updated	Union Executives and premium committee
	2.5% of the amount would be used on general and special meetings (At least Four)	To deepen members participation, democracy and also free flow of information. Also, to discuss fairtrade premium development plan	Union Executives

Problematically, the premiums that farmers receive after these costs are unevenly distributed. This is particularly the case with caretakers who get nothing at all due to their informal contract arrangements especially with absentee and aged farm-owners. However, absentee and aged farmers' share of the premium are affected when caretakers steal cocoa beans, sometimes in collusion with intermediaries like the purchasing clerks. As a result of the theft of cocoa beans, a falsified total annual cocoa harvest is recorded, and a distorted premium is calculated, affecting farmers' ability to receive the actual premium on cocoa they produce.

In most cases, the premium is not distributed on time. Farmers often receive the premium in October. The premium is supposed to be distributed between June and July, a period where

both the minor and major harvest are gone, and farmers are in most need of the premium for farm management activities. This delay causes high risk of disease and pest infestation and disrupts farmer group operational activities and community development projects.

Market incentives

The private sector uses the certification programme to mediate poor market relationship between the state and farmers. In addition to fixing lower producer prices, the state, through its purchasing clerks, provides farmers with what is usually called 'cocoa bonuses' on irregular basis. This may range between USD 0.8 and USD 1.7 on every bag (64.5 kg) of cocoa beans farmers produce (one bag was worth USD 100.52 in the 2018/2019 cocoa season). Sometimes the bonuses are given to the farmers in addition to cutlasses, soap, bags of rice, etc. Other minor household items are often distributed as Christmas presents to farmers. As a result of the certification scheme, the private sector firm pays farmers USD 2400 minimum per tonne, plus USD 240 premiums on every tonne of certified cocoa produced, which translates to USD 154.8 and USD 15.48 on a bag (64.5kg) of cocoa beans.

In order to receive this market incentive, certified cocoa produced by farmers must bear Fairtrade labels and traceability marks that describe the farmers' geographical and locational identities. These labels are forms of access mechanism that allow producers to trade their commodity in a market protected by barriers, such as the alternative or ethical cocoa market (cf. Guthman, 2014).

However, some farmers do not receive the actual premium at the right level relative to their annual cocoa output. This is caused by poor record keeping of harvests, often generating conflicts. For example, while helping the management team to distribute inputs and cash to farmers, the lead author received several complaints from the farmers that they were being cheated in relation to other farmers because they produced more cocoa beans than them. On one occasion, a complaint and protest led one farmer to terminate her membership from the association.

Additionally, purchasing clerks resort to adjustments of scale machines to steal some kilograms of cocoa beans. Such exploitation exists because the Quality Control Company (QCC) has limited institutional capability to undertake regular inspections. This suggests that the actual benefits from the incentives are at times not realised because the firm cannot deal with existing institutional problems of the state.

State-private sector power relations

The certification incentives and their distributional effects operate in the context of power and control exercised by the state and the organisations participating in the certification system. With respect to the environmental aspects of the certification, the private sector firm incentivises the certified farmers to conserve trees in their cocoa fields. The Farmer cooperative society reinforce farmers' motivations to conserve forest trees on farms on behalf

of the firm. The society distributes tree seedlings and educate the farmers on how to nurture saplings and incorporate tree conservation in their cocoa fields to attract more premiums. The society is now negotiating with the state for the certified farmers to own and benefit from the trees they plant and conserve. However, the state is still reluctant to relinquish tree rights to the farmers. An official of the Forestry Commission for example asserted that "farmers have the right to do whatever they want with their lands, but they cannot own the trees". The state thus still reserves the ownership rights over the 'environmental labour' (Otto & Mutersbaugh, 2015, p. 418) of the smallholder farmers.

Moreover, the state and the private actors exercise powers over the socio-economic aspects of the certification incentives. To begin with, the private sector firm distributes productive resources or livelihood assets to farmers through the Farmer Cooperative Society to influence farmers' production and labour practises. This enables the firm to gain or maintain market access to the certified cocoa beans. The material benefits associated with those livelihood assets also entice farmers to participate in the scheme. For instance, a farmer indicated that 'I joined the organisation because of what they promised us. For years now I can testify confidently that they have lived up to expectation. This has never happened before'.

On the other hand, the state exercises its powers by evaluating and screening the assets that are provided to cocoa farmers. Formally, any potential useable productive resources such as fertiliser, pesticides, herbicides, etc. either for sale or in the form of free handouts must be tested and endorsed by the Cocoa Research Institute of Ghana (CRIG). This state regulatory system serves to prevent negativities that may arise in the course of granting the firm the right to certify the rural cocoa production space. The cocoa sector of Ghana is noted for producing quality cocoa beans, fetching a better market price even before the advent of these certification programmes. The state wants to maintain this reputation on the international market (Interview with an official of COCOBOD, 2018).

When the state's control system is unsuccessful, a firm's certification programme is in potential jeopardy. This happens when fake or substandard inputs intrude into the local market (Interview with the Manager of the Farmer Cooperative Society, 2018). The farmer cooperative society and the certification body try to instil discipline and control actions of the farmers on behalf of the firm. They do this through education and training programmes where farmers are constantly advised to patronise the standardised inputs from cooperative's agrochemical store in addition to what they distribute to the farmers as premiums (Interview with a Cooperative Worker, 2018). The third-party verification processes by FLOCERT and the agronomic advice of the technical experts of the cooperative society also serve as control mechanisms. For example, farmers who use non-standardised inputs and practices are warned and subsequently can be excluded from the farmer organisation by the executive members.

Also, the certified farmers gain additional market benefits through the firm's payment of minimum and premium prices for producing certified cocoa beans, but do not have direct market relations with the firm. It is the state that still mediates market relations between the farmers and the firm. Lead firms do not have the direct market right to purchase Fairtrade or

ethical cocoa beans from the certified farmer groups. Both the private and public licensed buying companies buy cocoa beans in the rural communities and sell them to Cocoa Marketing Company (CMC) before they are sold to the firms[6]. "Farmers can get more market benefits and experience a higher annual income if we sell cocoa directly to Mondelez" (Interview with the Manager of the Farmer Cooperative Society, 2018).

In relation to the appropriation of market benefits, Ghana and Cote d'Ivoire have introduced a new price regime called the Living Income Differential (LID) where firms are asked to pay higher minimum and premium prices per tonne of US$ 2600 and US$ 400 respectively to cocoa farmers (Mieu, 2020; Nieburg, 2019). In order to prevent firms from evading the LID, the state is issuing threats to suspend the certification programmes of firms that fail to avoid the payment of the LID (Mieu, 2020; Nieburg, 2019). Between 2019 and 2020, both governments even halted certification programmes of some firms who avoided the payment of the LID, and eventually suspended forward sales of cocoa beans for the 2020/2021 season (Mieu, 2020; Nieburg, 2019). This is a controlling mechanism by the state to attain more gains from the firms for itself and for the smallholder farmers. The President of Ghana indicated that the LID is targeted at the 'manifest injustice' that characterised the chocolate economy (Mieu, 2020; Nieburg, 2019). In order to maintain the continuous flow of this benefit, the state of Ghana and Cote d'Ivoire are currently seeking to name and shame any firm that fails to pay this new market prices on cocoa beans (Aboa, 2021; Myers, 2021).

Furthermore, in recent times, COCOBOD adopted a new surveillance system to monitor and control the activities of firms and their certification programmes. The surveillance system includes the recruitment of retired security officials from the military, police, immigration and customs. One official of COCOBOD for example indicated, "we cannot let them operate without being monitored. We have a security system in place, and it covers the entire cocoa sector. If the firms want to evade the system, the system will expose them." In addition to this, COCOBOD is now recruiting and training staff of its Research Department to monitor and evaluate certification programmes of the private sector.[7] This is to ensure that major

[6] Certified cocoa beans reach firms via cocoa traceability marks and market procedures. At the farm gate, purchasing clerks of the licensed buying companies buy cocoa beans and use marks or labels to differentiate certified cocoa from the conventional ones. They also record the details of the farmers and where the cocoa beans are produced. The licensed buying companies would then transport and deliver the certified cocoa beans to CMC. CMC will keep the certified beans for the firms. Those certified cocoa beans must come from the villages where the firms operate their certification programmes. There is a time limit. If a firm fails to buy the certified cocoa beans from CMC on time, CMC reserves the right to sell them to different firm (An interview with Ghana Cocoa Board Official, 2020).

[7] Coco Post 2021, COCOBOD Trains Staff to Monitor Cocoa Sustainability Programs, at: https://thecocoapost.com/cocobod-trains-staff-to-monitor-cocoa-sustainability-programs/ (Retrieved in July 2021).

stakeholders especially the state and the cocoa farmers obtain the maximum benefits from the programmes.

Discussion and conclusion

This article provided new empirical evidence on the bittersweet outcomes of certification programmes and their connection to power and control by diverse actors. Using the theory of access, we first conceived and analysed certification incentives as access mechanisms from which smallholders derive multiple benefits as well as burdens. Secondly, we analysed how power and control by actors are expressed in the operation of the certification. We then analysed the distribution of incentives to farmers as an exercise of power by the private sector actors to influence and install sustainability at the supply chain. This re-distribution was necessary mainly because COCOBOD has been unsuccessful to adequately provide those incentives to smallholders in the first place and was losing its legitimacy to private sector initiatives. COCOBOD therefore secures its position as the main entity which influences the delivery of benefits from cocoa certifications alongside the lead firms who use the certifications to incentivise smallholder farmers and source continued access to ethical cocoa. The board also reinforces these gains by maintaining its foothold in regulating and controlling the operational activities of the certification programme.

To elaborate the above further, we indicated that smallholder farmers receive a range of incentives in the form of farm innovations and technologies, knowledge, financial capital, market opportunities, labour opportunities, authority, social capital and identity. These certification incentives enable smallholders to increase their crop yield levels and household income, improve how they control pest and disease, adapt their field crop to the changing weather, promote communal organisation and social interaction among smallholders and facilitate the construction of community amenities or delivery of services. That suggests that the incentives are powerful resources (Svarstad et al., 2018) that enable farmers to achieve outcomes by converting the resources to another (Bourdieu, 1986).

As the smallholders benefit from the incentives, the state and private sector firm, gain, control and maintain access to benefits. The state gains revenue from the certification because farmers produce more ethical for the firm. It does this through QCC and CMC which mediate the sale of cocoa beans to the firm. On the other hand, the firm gain by obtaining ethical cocoa from the farmers. The incentives are provided by the firm because farmers lack such powers, and the state is also less capable to provide them.

The private sector firm gains, controls and maintain the supply of ethical cocoa through the provision of incentives to farmers and the enforcement of the standards. For example, compliance of labour safety and environmental standards, and adoption of the right agronomic practices enable farmers to gain and maintain access to premiums and their relations with the firm. Here, access maintenance by smallholders is realised through compliance and adoption of certification standardised practices rather than distributing ones' resources to maintain the supply of benefit (cf. Rangan, 1997; Agyei, 2019).

However, the Farmer Cooperative Society had to bear bureaucratic and administrative cost of the certification programme. Also, most often the incentives distribute burdens such as rise in production costs and labour demands for female farmers and caretakers (cf. Mutersbaugh, 2002; Ruben & Fort, 2012; Neimark, et al., 2019). Dominant structural differences that characterise cocoa farming in rural communities in Ghana influence and reinforce the distribution of the burdens.

Also, the firm gains, controls and maintains access to the supply of ethical cocoa as it exercises some form of discursive power (cf. Svarstad et al., 2018; Kirst, 2020). For example, it influences farmers' actions and thoughts by disseminating knowledge via education and training programmes, and the employment of agronomic experts. This has been possible because the smallholders need them, and the state authorises the firm to exercise such power because the state lacks the capacity to do so.

The ability of the firm to incentivise farmers in the context of state incapability resonates with Sikor & Lund's (2009) discussion on access regarding the relationship between power, authority and legitimacy. Sikor & Lund (2009) argue that whenever an actor continuously seeks authorisation from another actor or institution for rights or power to operate, it eventually reinforces the authority and power of the authorising actor or institution. We have shown that this is the case for COCOBOD, which maintains a certain authority and regulatory power as it authorises the Mondelez, Fairtrade and FLOCERT and the cooperative society to operate the certification programme. In relation to this conceptualisation by Sikor & Lund's (2009), a different line of evidence and argument can be provided. We argue that the firm is authorised by COCOBOD to operate because it can provide incentives to the smallholders which the state cannot. As the firm exercises these powers, it mediates the poor relations between the state and the smallholder. In this way, the firm secures and maintains an operational recognition or legitimacy from the state at the supply chain to reorient farmers' labour and production practises to meet market preferences (cf. Moore, 2000; Neimark et al., 2016). This recognition is further reinforced through farmers' participation, their acceptance of the certification programme and their reliance on the firm for those incentives (cf. Suchman, 1995).

Sikor & Lund (2009) further argued that institutions and regulations can emerge, consolidate or recede through legitimisation process. We found this argument to be associated with the Farmer Cooperative Society. In our case, we see that the firm established the Farmer Cooperative Society to secure legitimacy and authority and facilitate the certification programme. We argue that as firm gains and exercises power, authority and legitimacy through the Farmer Cooperative Society, it further confers recognition on the cooperative society and solidifies its authority to organise production and labour practises of smallholders and also administer the certification incentives on behalf of the firm.

Moreover, while the firm gains and maintains authority and legitimacy through the certification incentives, the state remains resolute to control the powers of the firms and the smallholders in order to maintain its credibility as exporter of quality cocoa beans. The state

controls the firm's certification programme because it wants to maintain access to benefits, authority and legitimacy. For example, the state regulates the flow of inputs and monitors the certification programmes because it wants to protect its cocoa sector and obtain gains. It influences the firm to redistribute incentives such as the premiums to benefit the smallholders and itself. It remains reluctant to grant tree tenure rights to farmers in order to maintain its authority and rights over forest trees in off-reserve areas. Here, we argue that the state's power position and control relate more with the Sikor & Lund's (2009) argument on power, authority and legitimacy. This is because as long as firms continue to seek authority and recognition from the state (i.e. COCOBOD) to operate, the state will continue to reserve the rights and authority to control and regulate the certification programmes of firms. This argument also suggests that the existence of certain structures play important role in constraining the exercise of power (Bourdieu, 1977, 1989; Ribot & Peluso, 2003; Dowding, 2008; Svarstad et al., 2018).

Our analysis shows that access to benefits (and burdens) through various mechanisms always manifests in the context of power relations among different actors. While some actors gain, others control. Some actors too exercise some powers to maintain access to benefits. Also, the gaining, controlling and maintaining of access can be exercised simultaneously by an actor or a group of actors. In our case, smallholders gain and maintain access, but the state and the firm obtain, control and maintain access at the same time.

Our analysis of power relations sheds light on contrasting worldviews about firm-led certification programmes. Firstly, our findings suggest that the operation of cocoa certification programmes reflects the weakness of the state to adequately and efficiently regulate the production space. The firms have therefore capitalised on the weakness of the state through their certification programmes to shape the state's domination and monopoly over the cocoa sector. Secondly, it could be however argued that the operation of the certification programme is rather a reactive response of the chocolate industry to correct the historically established chains of exploitation and sustainability problems of which the industry has been partly responsible (Goodman et al., 2012; Goodman & Bryant, 2009; Goodman et al., 2010, 2017; DuPuis et al., 2006). Such response of the firms through their certification programme has consequently enabled them to sustain industrial growth and salvage its image (cf. Schneider, 2014). We can sum up these viewpoints to say that certification programmes are used as alternative political projects by firms (Goodman et al., 2012), pursuing legitimacy to obtain rights and access to benefits in the name of sustainability: to enhance livelihood, protect the environment, promote social justice and participation (Ansah et al., 2020).

In conclusion, examining the distributional effects of a certification programme in the context of power relations (i.e., who gains, who loses, who controls and who maintains access) provides a different and a more elaborate understanding of the bittersweet aspects of certification programmes. We suggest that future operation of certification programmes should be aware of the existing structural differences among farmers, the institutional constraints of the state so that burdens could be ameliorated, and skewed distribution of benefits and hindrances could be avoided.

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