

# Examining the EU Forest Law Enforcement, Governance and Trade (FLEGT) action plan in Ghana through a governmentality lens

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## Abstract

Over the past decade, the EU Forest Law Enforcement, Governance and Trade (FLEGT) action plan has emerged as a key global initiative in addressing deforestation and forest degradation. Yet, there is considerable scholarly debate and disagreement about the impact of FLEGT on forest governance, and ultimately, its effectiveness in arresting deforestation and degradation. This article contributes to this debate through a detailed examination of FLEGT in the case of Ghana. It applies a governmentality analytical lens that examines practices of problematization, knowledge production, intervention and subjectification. The article builds on a detailed review of the substantial literature on FLEGT in Ghana, the first timber producing country to enter into a voluntary partnership agreement with the EU. The article illustrates how FLEGT frames illegal logging as the central problem, and how this focus relegates other problems – especially those concerning tree tenure and benefit sharing – to secondary positions. This goes hand in hand with production of knowledge that stabilizes illegal logging as the key problem and provides legitimacy to the FLEGT implementation. The article then examines the many interventions which FLEGT has triggered. On the positive side, it has enhanced consultation and participation of private sector and civil society in forest governance, as well as increased forest sector transparency. Despite its stipulated aims, FLEGT has been less successful in nurturing deeper forest governance reforms that could provide incentives for agents in the sector to engage actively in forest conservation and cultivation of trees. FLEGT focuses on technical issues and challenges, failing to address inherently political issues concerning forest and tree tenure. It maintains local populations living in and close to the forest as passive subjects with limited rights to the forest or influence over its management. The article concludes that to achieve its aims, FLEGT needs to move away from its current technical focus and colonial forest governance model to seriously address issues of tree tenure, benefit sharing and access. It discusses what is required for such a change to take place, and more generally, what a governmentality lens has to offer political ecology.

**Keywords:** Governmentality, government rationalities, illegal logging, rendering technical, forest governance

## Résumé

Au cours de la dernière décennie, le plan d'action de l'Union européenne (UE) relatif à l'application des réglementations forestières, à la gouvernance et aux échanges commerciaux (FLEGT) est apparu comme une initiative globale essentielle pour lutter contre la déforestation et la dégradation des forêts. Pourtant, l'impact du FLEGT sur la gouvernance forestière et, en fin de compte, son efficacité dans la lutte contre la déforestation et la dégradation des forêts font l'objet d'un débat et d'un désaccord considérables dans la communauté scientifique. Cet article contribue à ce débat par un examen détaillé du FLEGT dans le cas du Ghana. Pour ce faire, l'article applique une grille d'analyse de la gouvernementalité qui examine les pratiques de problématisation, de production de connaissances, d'intervention et de subjectivation. L'article s'appuie sur un examen détaillé de la littérature existante sur le FLEGT au Ghana, le premier pays producteur de bois à conclure un accord de partenariat volontaire avec l'UE. L'article illustre comment le FLEGT fait de l'exploitation illégale des forêts le problème central et comment cette focalisation relègue les autres problèmes – en particulier ceux concernant la propriété des arbres et le partage des bénéfices – au second plan. Cela va de pair avec une

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production de connaissances qui consacre l'exploitation illégale des forêts comme le problème principal et confère une légitimité à la mise en œuvre du FLEGT. L'article examine ensuite les nombreuses interventions que le FLEGT a initiées. D'un point de vue positif, le programme a renforcé la consultation et la participation du secteur privé et de la société civile dans la gouvernance forestière et a augmenté la transparence du secteur forestier. Malgré les objectifs fixés, le FLEGT a moins bien réussi à favoriser des réformes plus profondes de la gouvernance forestière qui pourraient inciter les agents du secteur à s'engager activement dans la conservation des forêts et la culture des arbres. Le FLEGT se concentre sur les questions et les défis techniques, sans aborder les questions intrinsèquement politiques concernant la propriété des forêts et des arbres. Cette approche place les populations locales vivant à l'intérieur et à proximité de la forêt au rang de sujets passifs, avec des droits limités sur la forêt et une influence limitée sur sa gestion. L'article conclut que pour atteindre ses objectifs, le FLEGT doit s'éloigner de son orientation technique actuelle et de son modèle colonial de gouvernance forestière pour aborder sérieusement les questions de tenure des arbres, de partage des bénéfices et d'accès. Nous discutons de ce que nécessite un tel changement et, plus généralement, ce que l'approche de la gouvernamentalité peut offrir à l'écologie politique.

**Mots-clés:** Gouvernamentalité, rationalités gouvernementales, exploitation forestière illégale, "rendering technical", gouvernance forestière.

## Resumen

Durante la última década, el plan de Acción de Aplicación de la Ley Forestal, Gobernanza y Comercio (FLEGT en inglés) de la Unión Europea (UE) se ha convertido en una iniciativa mundial clave para abordar la deforestación y la degradación forestal. Sin embargo, existe un considerable debate académico y desacuerdo sobre el impacto de FLEGT en la gobernanza forestal y, en última instancia, su eficacia para detener la deforestación y la degradación. Este artículo contribuye a este debate mediante un examen detallado de FLEGT en el caso de Ghana. El artículo aplica una lente analítica de gubernamentalidad para examinar prácticas de problematización, producción de conocimiento, intervención y subjetivación. El artículo se basa en una revisión detallada de la abundante literatura sobre FLEGT en Ghana, el primer país productor de madera en firmar un acuerdo de asociación voluntaria con la UE. El documento ilustra cómo FLEGT enmarca la tala ilegal como el problema central, y cómo este enfoque relega otros problemas –especialmente los relacionados con la tenencia de árboles y la distribución de beneficios – a posiciones secundarias. Esto va acompañado de una producción de conocimiento que estabiliza la tala ilegal como problema clave y da legitimidad a la implementación de FLEGT. A continuación, el documento examina las numerosas intervenciones que FLEGT ha desencadenado. Por el lado positivo, ha mejorado la consultación y participación del sector privado y la sociedad civil en la gobernanza forestal, así como también ha aumentado la transparencia del sector forestal. A pesar de sus objetivos estipulados, FLEGT ha tenido menos éxito en fomentar reformas de gobernanza forestal más profundas que podrían proporcionar incentivos para que los agentes del sector se involucren activamente en la conservación forestal y el cultivo de árboles. FLEGT se centra en cuestiones técnicas y retos, fallando en abordar cuestiones inherentemente políticas relacionadas con la tenencia de bosques y árboles. FLEGT mantiene a las poblaciones locales que viven dentro y alrededor de los bosques como sujetos pasivos con derechos limitados para acceder los bosques e influenciar su gestión. El artículo concluye que, para lograr sus objetivos, FLEGT debe alejarse de su enfoque técnico actual y del modelo de gobernanza forestal colonial para abordar seriamente los problemas de tenencia de árboles, distribución de beneficios y acceso. El analiza los requerimientos para que se produzca este cambio y, de manera general, lo que la lente de la gubernamentalidad puede ofrecer a la ecología política.

**Palabras clave:** gobernabilidad, racionalidad gubernamental, tala ilegal, prestación técnica, gobernanza forestal.

## 1. Introduction

Deforestation is one of the world's most urgent environmental problems (FAO & UNEP, 2020). Over the past four decades, numerous international programs have been implemented to address (tropical) deforestation, including the Tropical Forest Action Program, timber import boycotts, programs on criteria and indicators for sustainable forest management, forest certification initiatives and, more recently, programs on Reducing Emissions from Deforestation and Forest Degradation (REDD+) (Kleinschmit *et al.*, 2016). Yet, in general, the progress has been modest due to a lack of sufficient economic incentives for agents of deforestation to stop current practices as well as conflict over environmental and social priorities and authority (Rayner *et*

*al.*, 2010). Among the emerging policy instruments to combat deforestation and nurture global and domestic forest governance we also find timber legality verification. It involves a multi-level mode of regulation and gains authority from demands for legal timber along transnational supply chains, while aiming to help enforce domestic rules (Cashore & Stone, 2012; Lesniewska & McDermott, 2014; Overdevest & Zeitlin, 2014b). The most far-reaching timber legality verification program to date is arguably EU's Forest Law Enforcement, Governance and Trade (FLEGT) action plan, but related programs are also in place in for example the US, Australia and China (Leipold & Winkel, 2016; Nathan *et al.*, 2018).

Under FLEGT, tropical timber producing countries and the EU enter into bilateral Voluntary Partnership Agreements (VPAs). These agreements specify what constitutes legal timber (legality definition) in the specific national context, they describe the Timber Legality Assurance System (TLAS) to be put in place to verify legality, and they outline a pathway and national commitment towards broader forest governance reforms, again in the specific national context (Beeko & Arts, 2010). Nine countries – Ghana, Cameroon, Republic of Congo, Central African Republic, Liberia, Indonesia, Guyana, Vietnam and Honduras – have entered VPAs with the EU and more countries are negotiating with the EU (EU FLEGT Facility, 2021b). A second, main component of the FLEGT program is the European Timber Regulation (EUTR) which requires all operators placing timber on the EU market to exercise appropriate measures to ensure legality (due diligence). Timber verified under a VPA qualifies for a FLEGT license and this license secures the timber a 'green track' into the EU market, that is, it is considered in compliance with the due diligence requirement (EU FLEGT Facility, 2021b). Ghana was the first country to enter into a VPA with the EU, it was in 2009, but currently Indonesia is the only country issuing FLEGT licenses (EU FLEGT Facility, 2017; Myers, 2020).

This article examines timber legality verification and its impact on forest governance in the case of Ghana. It applies a governmentality analytical lens (to be described below). A substantive scholarship exists on timber legality verification, including contributions that draw on political ecology. The literature widely disagrees on the impact of timber legality verification (FLEGT) on forest governance and its wider implications for deforestation, climate change mitigation, livelihoods and environmental justice. I will briefly summarize the key arguments, starting with the positive assessments, followed by the more critical ones.

An independent evaluation of the EU FLEGT Action Plan in 2015 concludes that VPAs generally have "effectively contributed" to improved governance, transparency, equitable solutions, "particularly in the engagement of diverse national stakeholders in VPA processes", and capacity building of civil society and government (Jonsson *et al.*, 2015, p. 15). Along similar lines, Bollen and Ozinga (2013) refer to the "unprecedented multi-stakeholder nature" of the VPA negotiation process, and describe how VPAs "have radically altered the negotiating and policy-making landscape" in the VPA countries (Bollen and Ozinga 2013, 15; see also Beeko and Arts 2010; Ozinga and Leal 2010). A recent evaluation of the outcomes of VPAs, encompassing Cameroon, Ghana and Indonesia, and examining the effects on sustainable forest management, development of formal and informal forest sectors, employment, and law enforcement and compliance, concludes that "impacts have been generally neutral or moderately positive, rarely negative" (Cerutti *et al.*, 2021, p. 2).

Taking a more theoretical point of departure, Overdevest and Zeitlin describe FLEGT as the core of an emerging transnational, experimentalist governance architecture in an arena (global forest governance) where interests diverge and there is no hegemon. They argue that FLEGT presents an innovative combination of demand and supply measures, participation of civil society and private sector in goal setting, collaboration between developed and developing countries with continuous monitoring, and review of national implementation in combination with a penalty mechanism (the EUTR) to sanction non-compliance. Key is its ability for synergies, locally adapted solutions, and policy learning (Overdevest & Zeitlin, 2014a, 2014b, 2014c, 2015, 2018). Based on detailed case studies of VPA implementation in Ghana and Indonesia, they conclude: "The VPA implementation process has proven a remarkably incisive framework for exposing such [governance] issues layer by layer, identifying their root causes, and thrashing out mutually acceptable solutions through iterated deliberations among local stakeholders, supported by the EU" (Overdevest & Zeitlin, 2016, p. 61).

Also in the positive 'camp', Cashore and Stone note that timber legality verification receives support from many actors in the forestry sector – firms, civil society and government – in both producing and importing

countries, because it relies on national level authority and creates a level playing field for firms. It establishes a platform for further governance reforms and other initiatives, including third-party forest certification (Cashore & Stone, 2012, 2014).

There are more critical views. Myers and co-authors, drawing on empirical data from Indonesia and Ghana, assert that FLEGT grants authority to a legality definition determined by the national state thereby occluding alternative views and understandings of legality. As a result, FLEGT consolidates the power and authority of state institutions over the forest which align with EU (Western) ideas and goals of Westphalian statehood and scientific forest management. The authors conclude that FLEGT imposes hegemonic notions of legality on non-state actors and perpetuates a colonial legacy (Myers *et al.*, 2020). Other scholars have presented related analyses, see (Hirons *et al.*, 2018; Lesniewska & McDermott, 2014; Van Heeswijk & Turnhout, 2013). FLEGT has also been analyzed as a 'fad'; that is, an initiative with initial, widespread enthusiasm and mobilization of resources followed by discrepancies and disagreements about end goals and eventual abandonment in favor of the next fad (Rutt *et al.*, 2018). The authors emphasize the emerging disagreement about the end goal being FLEGT licenses (trade control) or broader governance reforms in producer countries, and the slow progress on both. They conclude that FLEGT has many similarities with past international forest interventions, notably its failure to challenge concentrations of power and resources.

This article aims to contribute to the scholarly debate on timber legality verification and its impacts. It applies a governmentality analytical lens to FLEGT implementation in Ghana (Dean, 2009; Foucault, 2008; Li, 2007c; Rose, 1999). Such analysis offers the opportunity for a more detailed diagnosis, beyond sheer praise or blame (Rose & Miller, 2010, p. 112). Ghana provides a relevant case because it was the first country to enter into a VPA with the EU and hence offers observations, data and experiences spanning more than a decade. As the above summary testifies, VPA implementation in Ghana has already been the subject of intense scholarly analysis and debate, and the article makes its specific contribution here. The article builds its arguments on a detailed review of the comprehensive scientific literature on FLEGT implementation in Ghana which has emerged over the past decade, combined and complemented with an analysis of other written materials, including policy documents, legislative texts, project documents, consultancy reports and project publications. These sources are combined with the author's long engagement in political ecology research in Ghana. The article proceeds as follows. In the next section, I present the governmentality analytical framework. It is followed by a brief introduction/background to forest and forest governance in Ghana. This section is primarily for readers not familiar with the Ghana country context. The results/analysis section follows, structured in accordance with the analytical framework; having sub-sections on problematization, knowledge production, intervention, subjectification and counter practices. The final section positions the analysis in the scholarly debate and concludes.

## 2. Analytical framework: Examining FLEGT through a governmentality lens

In this section, I discuss the construction of the analytical framework applied in this article in examining FLEGT implementation in Ghana. I discuss the concept of governmentality, government practices and counter practices.

Michel Foucault famously coined government as the "conduct of conduct" (Gordon, 1991, p. 2), but I find the following, more elaborate definition more useful: "Government is any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through the desires, aspirations, interests and beliefs of various actors, for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes" (Dean, 2009, p. 18).<sup>2</sup>

Governmentality, then, refers to the different modes or mentalities of government; how we think about government; the different rationalities involved in different types of government (Dean, 2009; Fletcher, 2010; Foucault, 2008). Foucault traced from the onset of modernity in Europe an important shift in the dominant rationality of rule: from sovereign rule over life and death ("to take life or let live") to attempts to effectively

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<sup>2</sup> On government and governance, see also (B. J. M. Arts & Visseren-Hamakers, 2012, p. 241; Kjær, 2004, p. 10).

govern entire populations for their wellbeing ("to make live or let die") using statistics and emerging social and life sciences (Bluwstein, 2018, p. 146; Cavanagh, 2018, p. 405). Foucault calls this biopower/biopolitics, and initially– and confusingly – also governmentality. Subsequently, governmentality gained its more general meaning of mentalities/rationalities of government, as alluded to above. Four distinct government rationalities (governmentalities) may be considered: sovereign, disciplinary, neoliberal and government according to truth (Fletcher, 2010; Foucault, 2008). They are not mutually exclusive, categorical or to be applied as a schematic topology. They co-exist; they overlap, they compete and challenge each other, and they are indeed the battle ground for political debate and contest (Foucault, 2008, p. 313).

A sovereign governmentality involves the direct exercise of power through construction and enforcement of codified rules and enforcement mainly exercised through force (coercion) or the threat of force and punishment. A disciplinary governmentality emphasizes the internalization of social norms and practices. This is done in multiple ways, in schools, in public campaigns, public discourse and so on. Compliance is assured through citizens' acceptance (internalization) and fears of deviance from the social norms, rather than enforcement of codified rules. In the words of Foucault: "...it is not a matter of imposing a law on men, but of the disposition of things, that is to say, of employing tactics rather than laws, or, of as far as possible employing laws as tactics; arranging things so that this or that end may be achieved through a certain number of means" (Foucault, 2007, p. 99). Disciplinary power does not flow from a central point but circulates through the capillaries of collective life (Ahlborg & Nightingale, 2018; Collier, 2009, p. 81; Svarstad *et al.*, 2018).

A neoliberal governmentality attempts to achieve desired outcomes through economic incentives and dis-incentives that motivate citizens to actions and behaviors that are in accordance with the goals of society (Fletcher, 2010, 2017). Finally, and perhaps more abstract and unspecific compared to the other governmentalities, government according to truth is "the truth of religious texts, of revelation, and of the order of the world" (Foucault, 2008, p. 311). Here, government rationality is derived from fundamental claims on the nature of life and the universe, as found in religious beliefs or political ideologies, for example Marxism (Fletcher, 2010).

### *Practices of government*

The study of government and governmentality "...is not to start from the apparently obvious historical and sociological question: what happened and why. It is to start by asking what authorities of various sorts wanted to happen, in relation to problems defined how, in pursuit of what objectives, through what strategies and techniques" (Rose, 1999, p. 20). In other words, it is to examine practices of government; how thoughts are made practical and technical (Dean, 2009, p. 27; Li, 2007b, p. 264).

Various concepts and constructs have been suggested to classify and describe the diverse practices and elements within a particular regime of practices. They all emphasize four key practices: i) problematization; ii) knowledge production; iii) intervention; and iv) subjectification (Dean, 2009; Li, 2007c, 2007b; McElwee, 2016; Rose, 1999).

Problematization concerns the ways of seeing and perceiving problems in need of a solution. It typically involves a kind of 'tunnel vision' that brings a few, selected aspects into focus in an otherwise highly complex and diverse reality, and occludes other issues from view. James Scott talks about "state simplifications" and use the analogy of the hedgehog "who knows only one big thing" and the fox, who knows "a great many things" (Scott, 1998, pp. 76–83). Problematization is like hedgehogism, it narrows knowledge and perceives a much simplified model of the confusing, diverse and complex reality that constitutes the real world (Beinart & Hughes, 2007, p. 202). The practice of problematization is intimately related to the practice of knowledge production. Problematization makes the issue in focus susceptible to a detailed investigation and examination that can be systemized and made schematic, for example in the form of maps, graphs and tables. In the words of Scott, knowledge production makes the problem 'legible' and object of specific government interventions.

Intervention concerns the technical aspect of government: How is conduct shaped? It examines the mechanisms, procedures, instruments, techniques and technologies deployed to shape conduct (Dean, 2009, p. 42; McElwee, 2016, p. 27). Finally, subjectification concerns what subjects and positions/identities are assumed by the intervention, and what subjects and positions/identities that the intervention attempts to create/shape.

The various practices are intimately linked and hard to separate. They are engaged concurrently and do not follow any fixed order or chronology. Indeed, they combine in a particular 'package': the identification/formulation of a particular 'problem' closely relates to the establishment of a particular 'truth' and knowledge production, which again is intimately related to a 'solution'; a particular (set of) intervention(s) assuming particular subjects or the creation of particular subjects. Tania Li usefully talks about the construction of a 'technical matrix' and of 'rendering technical' (Li, 2007c). The latter relates to the practice of taking out complexity and contingency by presenting the issue in a simplified and oftentimes technical manner with a specific technique or technology to be applied as solution (Ferguson, 1994; Li, 2007c, p. 7; Rose, 1999, p. 33). Rendering technical thus cuts across the four governmental practices.

### *Counter practices*

Government interventions seldom achieve their (exact) anticipated results; in many situations results and effects may be far from those planned (Scott, 1998). Foucault illustratively talks about a 'witches' brew' that emerges when an intervention meets the 'reality' made up of humans and non-humans in complex processes and structures. Yet, Foucault and other scholars of governmentality have little to say about this, because they, in line with the concept/definition of governmentality, are interested primarily in the rationality of government and how it came about, not its engagement with reality. For this reason, they typically stop short of examining the entanglement of idea with reality (Li, 2007a). Tania Li thus distinguishes between an analytics of governmentality and a more ethnographic study of counter practices, the latter with the key empirical question: "What are people connected with a governmental program as proponents, implementers or targets, actually doing?" (Li, 2007a, p. 280).

This brings various types of counter practices into focus. These may take the form of, or be considered as, acts of resistance. It comes in many forms depending on the context and the 'weapons' at the disposal of the resisters; it may be open (publicly declared) or undisclosed, disguised forms of resistance (closed/hidden resistance; infra-politics) (Cavanagh & Benjaminsen, 2015; Guha, 1989; Scott, 1989, 1990). Counter practices may also involve practices and acts of compromise and/or accommodation. For example, the tacit decision by a street level bureaucrat to look the other way when rules are broken because enforcement would challenge social ties and relations (Li, 2007a, p. 280). It may also include street level bureaucrats' non-reporting to their superiors, or the construction of an intervention as a success, or the deliberate failure to collect and present data that would compromise the intervention. Compromise and accommodation may of course also be linked to corruption and personal gain (Blundo *et al.*, 2006).

With key concepts discussed, we are now ready to present the analytical framework used in this article. Table 1 illustrates how the governmental practices of problematization, knowledge production, intervention, subjectification and counter practices are operationalized into central questions in relation to FLEGT implementation in Ghana that the article attempts to answer.

<b>Practice</b>	<b>Central question in relation to FLEGT implementation</b>
Problematization	What problems are framed (made visible) in FLEGT and what problems are excluded?
Knowledge production	How is knowledge produced and used in relation to FLEGT?
Intervention	How does FLEGT shape conduct, or attempt to shape conduct?
Subjectification	How are subjects formed? What subjectivities/positions does FLEGT assume and what subjectivities/positions does FLEGT attempt to form?
Counter practices	How do people – implementers and targets – react to FLEGT?

Table 1: Analytical framework.

### 3. Background and context

Before going into the analysis, a bit of background on the Ghanaian forest, forest sector and governance may be beneficial. Readers who are familiar with this may proceed to the analysis. FLEGT focuses – like all previous forest policy interventions in Ghana – on the 'High Forest Zone', the southern-most third of the country with closed canopy forest/tree ecosystems; the northern two-thirds of the country hold more open, savannah vegetation. The forest has been influenced by humans for centuries. The High Forest Zone is today a mosaic of different land uses, including small-scale cocoa farms, other perennial crops, (rotational) subsistence farming, protected forests (forest reserves) and areas with gold mining (Figure 1).

With regard to governance of the forest, four periods may be distinguished. First, the colonial period (1874-1957) during which the British colonial power reserved about 20 percent of present day Ghana as forest reserves to secure a conducive (humid) environment for agricultural production, cocoa in particular, and to safeguard timber resources. In the forest reserves, a strict management regime was put in place based on the principles of scientific forestry. The timber harvest was relatively low during most of the colonial period, but timber export soured after WWII. Between 1957 and 1979 – extractive period I following independence – Ghana initially experienced a continuation of the timber boom but also a decline in the forest institutions that had been put in place during the colonial period and a rise in patronage and political corruption (Hansen & Lund, 2017). Towards the end of this phase, in the 1970s, timber harvest declined drastically as a consequence of political instability and nationwide economic decline. During extractive period II (1980-2010) Ghana experienced a second timber boom, aided first by structural adjustment programs, subsequently by donor programs in support of 'sustainable forest management' (Hansen & Lund, 2017). The result of these interventions was a bifurcated sector: A 'formal' sector with firms holding timber rights granted by the central government and almost exclusively producing for the export market, and an 'informal' sector without timber rights ('illegal' timber harvest) producing lumber at the felling site with the use of chainsaws and supplying the domestic market (Marfo, 2009). The timber harvest of the formal sector exceeds the annual allowable cut (the regulated harvest level) and the harvest of the informal sector is larger than that of the formal sector, which brings the combined, total harvest far beyond any notion of sustainability (Hansen & Treue, 2008). It is on this background that Ghana and the EU started discussions on a VPA. The agreement came into force in 2009. I consider this the start of a new phase, the FLEGT period, which is the object of this article.

### 4. Analysis: FLEGT implementation in Ghana

#### *Problematization*

The FLEGT Action Plan is the key policy document and it identifies illegal logging as the central problem. FLEGT aims at the reducing illegal timber in the EU, and ultimately everywhere in the world, with the broader goal of reducing deforestation, improving rural livelihoods and improving forest governance in producer countries (EU, 2003, p. 3). It asserts that illegal logging is closely associated with corruption and organized crime which undermines rule of law, principles of democratic governance and human rights. It also argues that illegal logging fuels violent conflicts. Third, illegal logging is considered to undermine the competitiveness of legitimate forest industry operations and to curb the ability of these industries to undertake sustainable forest management. Fourth, it results in lost revenues of governments, estimated at € 10-15 billion (US\$10.7bn-16bn) annually. Fifth, illegal logging causes environmental damage and loss of biodiversity; it can be a contributory factor to the process of deforestation and increase the vulnerability of forests to fire, both with climate change implications. Finally, it argues that illegal logging has long-term negative impact on the livelihood of forest-dependent people (EU, 2003, pp. 4–5).

The VPA between Ghana and the EU also presents illegal logging as the central problem. The justifications are identical to those of the FLEGT Action Plan (EU-Ghana, 2010). In the years leading up to the VPA and immediately after, key policy papers have a parallel emphasis on illegal logging. Ghana VPA discussion papers, for example, emphasize the role of illegal logging in deforestation, its role in reduced timber revenues (taxes) and its distortion of domestic timber prices (MLFM, 2005, 2007). The centrality attributed to

illegal logging also shows in the 2012 Ghana Forest and Wildlife Policy, which ranks illegal logging as the top challenge in the forest sector, again emphasizing the domestic market as both cause and effect:

There is over exploitation of timber resources with the official annual allowable cut (2.0 million m<sup>3</sup>) being consistently exceeded by an estimated 1.7 million m<sup>3</sup> annually for more than a decade. Biodiversity loss is very high with more than 10 species projected to becoming extinct in less than a decade... The past policy was export-oriented and failed to address domestic utilization of timber products. This has resulted in a huge domestic timber demand gap which has induced widespread illegal chainsaw operations in the supply of lumber to the market. (MLNR, 2012, pp. 5–6)

All in all, illegal logging has been the all dominant forest policy issue and focus in Ghana since 2010, perhaps only challenged in terms of prominence by the related discussion on REDD+, but with the two discussions only occasionally coming together.

A broad coalition, consisting of timber firms, wood product manufacturers, civil society groups, national and international NGOs, government agencies and development partners in Ghana, EU and globally, supports the problematization of illegal logging, yet with divergent rationales (Carlsen, 2014; Marfo & McKeown, 2013; Nathan *et al.*, 2014; Overdevest & Zeitlin, 2014b; Satyal, 2018). These institutions, individually and in various assemblages, contribute to consolidating the visibility of illegal logging as a key environmental problem and in stabilizing the framing/justification through projects, meetings and workshops, and publications. Important 'hubs' are the European Forest Institute's EU FLEGT facility, the EU-based NGO FERN, and the illegal logging portal of UK based Chatham House, just to mention a few.

Any problematization involves simplification and omission. Illegal logging brings timber into focus, thereby occluding other uses and products from the forest – uses, services and products more important for rural livelihoods than timber – or at least relegating them to secondary positions (Hansen *et al.*, 2015). It should of course be noted that FLEGT intends to use timber, and timber governance, as driver for broad-based forest governance reform, that is, the reforms do not only focus on timber and do not stop with timber, but as I hope to demonstrate in this article, the process so far has showed few developments to this effect. FLEGT continues the focus on timber and timber governance that has dominated forest policy discussions in Ghana over the past many decades (Hansen & Lund, 2017).

Another, yet related, simplification relates to how illegal logging is defined. FLEGT sees illegal logging as timber harvesting in violation of national laws (EU, 2003, p. 4). In Ghana, a legality definition has been negotiated as part of the VPA process. This definition confirms, and thus consolidates, a notion of what is legal and what is not – entitlements and rights – that can be traced back to colonial and early independence days, notably the 1962 Concessions Act. All (timber) trees are vested in the President in trust of the stools (the land owning communities). This goes hand in hand with a governance regime with the Ghanaian state and its main forest governance institution, the Ghana Forestry Commission, at the apex with a mandate to define and enforce rules. So there is nothing new in the legality definition. It occludes alternative notions of legality and legitimacy, including customary rights to forest and trees, and benefit sharing (Acheampong & Maryudi, 2020; Lesniewska & McDermott, 2014; Maryudi *et al.*, 2020; McDermott *et al.*, 2020; Myers *et al.*, 2020). This is no small and unimportant issue, but a definition with concrete, material effects and a continued criminalization of most forest activities.

To be fair, the EU FLEGT Action Plan and the Ghana VPA do acknowledge the limitations of the legality definition and how it stabilizes the *status quo*. In this regard the Action Plan stresses the importance of working with partner governments "to ensure that key underlying factors, such as land tenure and access to forest resources, encourage local participation in the fight against illegal logging" (EU, 2003, p. 6). In the Ghana case, the VPA stipulates the need for supplemental measures to strengthen sector governance and the legal framework. An appendix to the agreement presents a long list of areas in need of legal reform (EU-Ghana, 2010, p. article 15). I examine these legal reforms in what follows to show how little they have challenged the *status quo*.

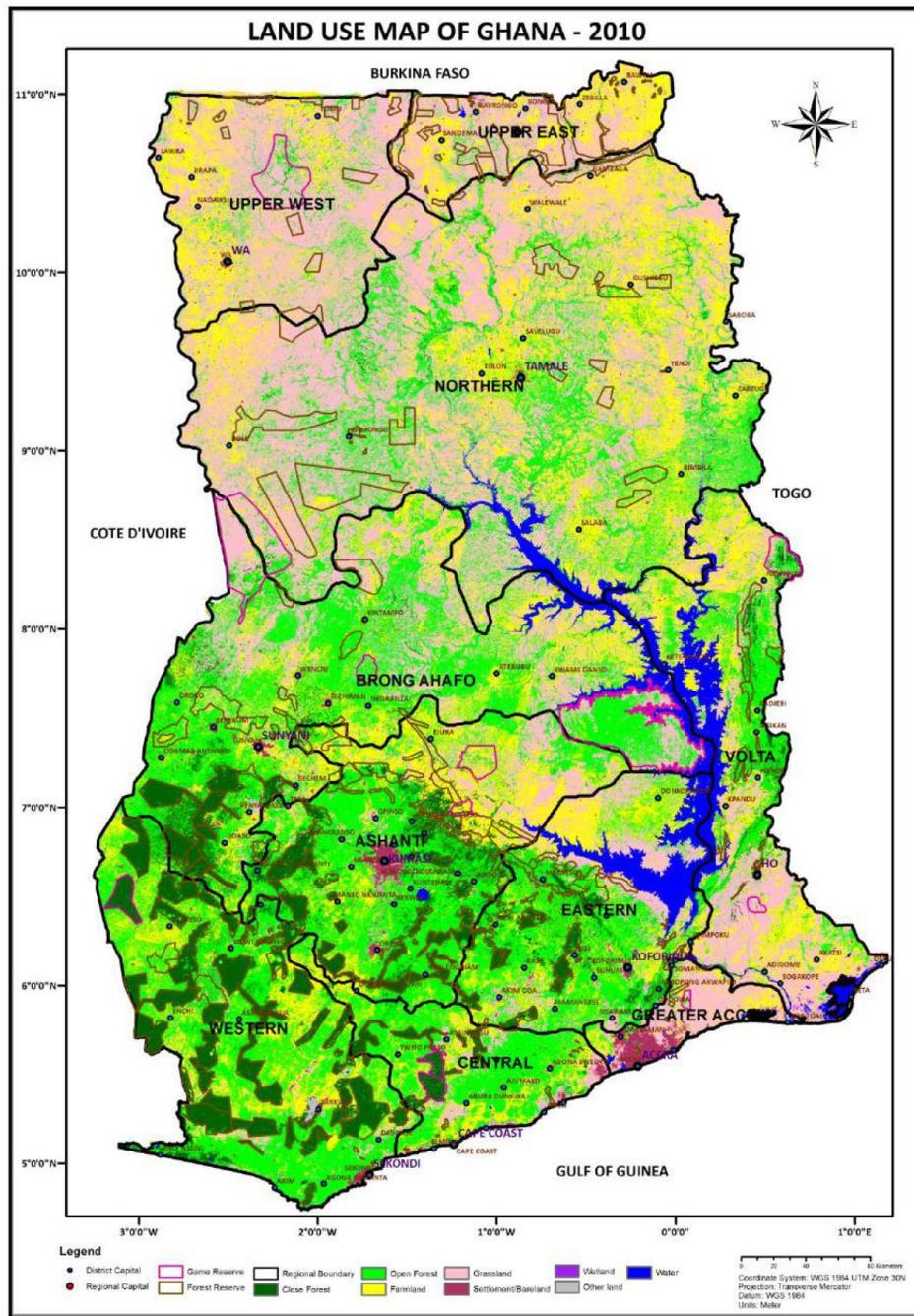


Figure 1: Ghana, showing the High Forest Zone (southern part of Ghana) – green color. Forest reserves (closed canopy forests) in dark green. Map reproduced from (MLNR, 2016a).

### *Knowledge production*

Knowledge production makes an object real and amenable to evaluation and calculation, which are required to devise intervention(s). Knowledge also provides justification for the problematization, and ultimately, the proposed intervention(s). Knowledge production has multiple dimensions and governing forests relies of multiple sources and forms of knowledge, and also the knowledge production of the past. Because of space, I here focus on two aspects of knowledge production and circulation of particular relevance for FLEGT: knowledge production on the occurrence (extent) of illegal logging and knowledge production on VPA implementation in Ghana. I want to illustrate how the knowledge production holds elements of what I call 'production of ignorance.'

First, on the extent of illegal logging in Ghana, the central source is the 2001 study by Birikorang and colleagues who estimated the total annual harvest to 3.7 million m<sup>3</sup> round wood equivalent (RWE).<sup>3</sup> The harvest divides more or less equally between the formal sector – firms with logging rights issued by the central government (2.0 million m<sup>3</sup>) and the informal sector – firms, groups and individuals without such rights (1.7 million m<sup>3</sup>) (Birikorang *et al.*, 2001). Since the annual allowable cut (ACC) at this point was one million m<sup>3</sup>, all allocated to the formal sector, the study documents a high level of illegal logging, and an illegal logging driven by the informal sector for the domestic market. More studies have followed, including studies on the domestic market. Obiri *et al.* through a survey in all major domestic markets in Ghana estimate the timber consumption to 660,000 m<sup>3</sup> of products (some 1.9 million m<sup>3</sup> RWE) of which 88% come from chainsaw operators (informal sector) (Obiri *et al.*, 2009). A subsequent study based on measurement of vehicle movement into the 19 major domestic timber markets in Ghana estimates that 1.4 million m<sup>3</sup> of timber products are consumed annually equal to 4.1 million m<sup>3</sup> (RWE); more than double the previous estimates (Hansen *et al.*, 2012). The informal sector provides 80%. Subsequent work largely confirms these findings (Marfo *et al.*, 2016).<sup>4</sup>

This knowledge production makes illegal logging visible and concrete. But is also provides legitimation for FLEGT. What the knowledge production does specifically is to bring the illegal logging by the informal sector for the domestic market into focus. First, because of the sheer magnitude of the domestic market harvest relative to the export harvest. Second, because the export harvest is assumed to be, at least partly, legal, in the sense that it being conducted by firms with government sanctioned timber rights. The entire harvest of the chainsaw operators is by definition illegal, whereas for the formal sector it is only what is over and above the allowable cut.

The harvest and illegal logging statistics are presented as aggregated, national level estimates. If the harvest statistics are broken down to tree species groups, which they are typically not, they would reveal that the commercially most important species are harvested at levels that may be up to 10 times the annual allowable cut, and that even the officially recorded harvest shows gross overharvest of these species (Boakye, 2015; Hansen & Treue, 2008). Such specification would qualify the view on illegal logging because it would bring the formal sector and their role in illegal logging more into focus. But even more importantly, it would problematize the current forest management regime, which the FLEGT implementation relies on. This perhaps explains why such knowledge production (disaggregation of harvest statistics) and circulation is not mainstream. What we see here may be called 'production of ignorance'; knowledge does not simply 'flow' and erase ignorance but is variously smoothed or blocked (Dove & Kammen, 2015, p. 124). Whatever the reason, the timber harvest statistics in Ghana, while routinely compiled annually, are not made publicly accessible.

I want to discuss how FLEGT implementation in Ghana relies on production of ignorance in other ways as well; ways that may be considered even more problematic than what we have discussed above. To make this point, a bit more background and context is required. FLEGT implementation relies on many sources and types of knowledge. This includes knowledge in the form of maps, classifications and measurements (forest inventories). In Ghana, forests have been reserved, divided into production and protection forests, inventories

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<sup>3</sup> This is the figure mentioned in the 2012 Ghana Forest and Wildlife Policy. The authors derived the estimate from export statistics, data on lumber consumption in the domestic market, and assumptions on recovery rates (raw wood > final products) for the formal and informal sector.

<sup>4</sup> A recent study suggests that the share of timber produced by the formal sector in the domestic market is going up, and consequently, the informal sector's share is going down. This is attributed to VPA implementation (Obeng *et al.*, 2020).

done to determine the standing (growing) stock and sample plots established and measured to know growth rates and to estimate the 'sustainable' take out of timber, and management plans have been prepared (Hansen & Lund, 2017). This is a knowledge production that has spanned 100 years, but a particular and very substantial knowledge production took place in the late 1980s and 1990s, aided and financed by donors. In the past two decades, at least in principle, forest management has relied on this knowledge production with little effort to update or improve on it. The consequence is an outdated knowledge base. For example, the latest inventory of the forest reserves dates back to 2001 but many reserves have not inventoried since the 1980s. For forests and trees outside the forest reserves, the latest nation-wise stocktaking dates back to 1999. The same with forest management plans, the central documents to guide forest management. They have not been revised since the 1990s (Overdevest & Zeitlin, 2018).

FLEGT emphasizes scientific forestry principles as a mean in achieving sustainable forest management. Consequently, the Ghana legality definition includes a requirement for a valid forest management plan, which at least indirectly assumes an up-to-date knowledge base. What has happened is that VPA implementation has triggered a process of rapid revision of outdated forest management plans, again with financial and technical assistance from donors. To date 62 management plans have been updated (JMIRM, 2019, p. 8).<sup>5</sup> However, no new inventory data or other forms of detailed ground assessment of forest conditions has been collected. Indeed, the text of the 'revised' management plans is generic and general, based on deskwork and not specific to the forest reserve in question. The plans provide long lists of standard (same for all plans) activities of forest protection and management but no specific costing or revenue plan which beg questions to their relevance and likelihood of implementation. On the aspect of participation, the plans are silent about who and how, and the rapid plan preparation questions the level of stakeholder involvement (Hansen *et al.*, 2018). What we see here, I argue, is a VPA implementation and knowledge production that attempt to hide information gaps and inherent problems with the current forest management regime. Again, a knowledge production which gives legitimacy to the current forest management regime, the institutions behind it, and to FLEGT. It occludes knowledge that would have transpired from new forest inventories and other assessments. Such knowledge production would likely illustrate a highly disturbed and degraded forest; a forest more amenable to protection and restitution than continued commercial exploitation (which is what is envisaged under the VPA). It would also challenge the current institutions, understood as both rules and organizations, as being part of not only the solution, but also the problem.

### *Intervention*

The Ghana VPA comes with aspirations for broad-based forest governance reforms; to do things in new ways; to provide new incentives and normative underpinnings for forest management for all actors in the sector (EU-Ghana, 2010, p. Annex II). It is also true that FLEGT implementation in Ghana has triggered a large number of activities and projects. An overview compiled by the FLEGT Facility of the European Forest Institute lists 27 projects related to VPA implementation in Ghana divided into timber legality verification (9), legal reforms (5), domestic market issues (4), monitoring (5), transparency (9) and information dissemination and sharing (15) and with a host of institutions involved: government agencies, private sector, civil society, international NGOs and donor agencies (EFI, 2021).<sup>6</sup> In what follows, I use this typology in examining and discussing FLEGT intervention in Ghana in four arenas: timber legality verification, legal reforms, domestic market issues, and consultation, participation and transparency.

### Timber legality verification

Timber legality verification has been at the core of the VPA both in terms of attention, time and resources. In Ghana, it includes a legality definition formulated in the VPA and put in legal form in the Timber

<sup>5</sup> The same source, however, also notes that in 19 areas, timber production takes place without a valid management plan. See also (Adams *et al.*, 2021).

<sup>6</sup> A project can qualify for more than one category. It is difficult to estimate the total amount spent on the projects because some of the projects cover more countries than Ghana. The overview may even be conservative in that it appears to fail to capture some recently implemented projects.

Resource Management and Legality Licensing Regulations (TRMLLR), enacted in 2017. Second, a wood tracking system tracing the wood from the forest, during transport, processing to marketing. If all requirements are fulfilled for a consignment/lot, the Forestry Commission will issue a legality license. A newly established department, the Timber Validation Department, under the Ghana Forestry Commission, is tasked with the verification of legality and licenses. A Timber Validation Committee with representatives of government agencies, forest sector organizations, landowners and NGOs has been established to oversee the performance of the legality verification system.

The timber legality verification regime intends to shape the conduct of actors in the forest sector. All actors who log trees and process timber – in both domestic and export markets – should now in principle have greater incentive to comply with the legislation because of the higher risk of detection in case of non-compliance, because of new layers of control and more fine-grained control measures compared to before the VPA. For the same reason, it is more risky for forest frontline personnel and other law enforcing agents to collude with agents in the timber sector (Teye, 2013). Finally, the timber legality license provides a 'green track' into the EU market, hence offering a positive incentive for timber firms exporting to the EU, and for Ghana as a country through enhanced tax revenues and more jobs.

A lot of effort has gone into the development of timber legality verification in Ghana spanning more than a decade, including financial and technical support from development partners. The system had to tackle numerous technical challenges (Ghana-EU, 2019; Overdevest & Zeitlin, 2018). A recent independent assessment, however, concludes that the system is not ready. It identifies three major gaps: the conversion of extant leases to Timber Utilization Contracts, discussed below, the absence or obsolescence of forest management plans, discussed above, and the "effective resolution of non-compliances associated with the supply chain" which I interpret as domestic market issues, also discussed below (EU FLEGT Facility, 2021a).

### Legal reforms

A first observation is that there appears to be general agreement among most actors and stakeholders, including researchers, on the need for tree tenure (legal) reforms because the current tenure arrangements do not provide appropriate (economic) incentives for key actors – farmers, land owners and firms – to actively engage in forest management, conservation and planting of trees, rather the opposite, they provide incentives to engage in 'illegal' activities (Afriyie & Abass, 2020; EU-Ghana, 2010; Hajjar, 2015). Where views diverge is on the extent, direction and depth of such reforms. Before I examine what FLEGT implementation has done concretely in terms of legal reform, a bit of historical context is required.

In Ghana, since 1962, all (timber) trees are vested in the President. This means that the government of Ghana acts as trustee on behalf of the landowners, who are the formal 'owners'. The Ghana Forestry Commission holds the mandate to manage, conserve and protect forests and trees. It grants timber rights (concessions) to timber firms who in return pay fees (taxes) that are shared with landowners. Over the years, allocation of timber rights has been a contentious political issue with indications of corruption and patron-client relationships (Carlsen & Hansen, 2014; Hansen & Lund, 2011). A 1998 legal reform attempted to introduce competitive bidding for timber rights and to reserve timber rights for small-scale community projects in the form of timber utilization permits, but the competitive bidding failed and the Forestry Commission issued timber utilization permits, and another type of timber rights, salvage felling permits, in large numbers and outside the intended scope (Akapame, 2020; Danso & Opoku, 2004).

The fee revenues are shared with the land owners. Yet, the financial transfers are small, both nominally and relative to the value of the timber. There are at least three reasons for this. First, the Forestry Commission deducts a share of the fees, approximately 50%, as payment for its management. Second, the revenues that remain after this deduction are shared with other stakeholders (district assemblies and traditional councils) in line with stipulations in the Constitution of Ghana. Third, the nominal fee rates, despite a legal requirement for quarterly revision, are only revised occasionally (Birikorang, 2015; Hansen & Lund, 2011). Local communities benefit from timber harvest through social responsibility agreements (SRAs) between the community and the timber firm. The SRA contract, which is mandatory, typically provides infrastructure facilities, cash payments or other amenities to local communities within the concession area. The value of the SRA is pegged to 5% of

the stumpage fee, so while providing valuable and appreciated services and amenities to local communities, it does not fundamentally alter the benefit sharing arrangement (Agyei & Adjei, 2017).

Now back to the central question: What has FLEGT achieved in terms of legal reforms? First, there has been work on 'streamlining' timber rights allocation and associated transparency. This is a result of domestic and international pressure from civil society and development partners using the VPA as leverage. The abuse of the timber utilization and salvage felling permit instruments of the past seems to have stopped. Second, TRMLLR has introduced a better protection of landowners' rights, at least on paper, through a new, and more elaborate procedure of consultation prior to concession award and with the possibility of landowners objecting the grant of concession. Third, it has introduced small-scale timber rights; something that in principle should make it easier for small scale firms to obtain timber rights. That said, the procedures are cumbersome and it will be really challenging for current 'illegal' and 'informal' actors to comply with the requirements. Fourth, FLEGT implementation has increased focus on SRA negotiation and compliance, again a positive development, although there still seems some way to go (Kumeh & Abu, 2019). An issue yet to be resolved is the conversion of extant leases (old timber rights) to new legal documents (so-called Timber Utilization Contracts), an issue that has been part of the policy discussion since 1998 (Adams *et al.*, 2021).

Despite these developments, the fundamental tree tenure issue remains unsolved: Landowners and farmers have little incentive to maintain trees on their land, and if they have trees, they can benefit more from engaging with chainsaw operators outside the formal legislative arrangement (Afriyie & Abass, 2020; Hansen, 2011; Marfo, 2010). FLEGT has triggered new studies on the issue (Akapme, 2016; Hajjar, 2015; MLNR, 2016b). These studies confirm the problem but appear less conclusive in terms of solutions. The following quote gives a good summary of the situation, I think, and the main problem with the legal reform process:

...Ghana's timber policy has produced unintended outcomes and has never been aligned with the interests of customary landowners whose land management decisions have a direct impact on forest cover. Reforms being proposed skirt the main cause of the problem, create additional administrative hurdles for farmers and the FC [Forestry Commission], and do not address perverse incentives that work against landowner and farmer interests... to effectively create a balanced and sustainable sector, tree tenure law and policy needs to be simplified and re-aligned with the interests of landowners and farmers by transferring rights to all natural and planted trees to customary landowners off-reserve. (Antwi *et al.*, 2018, p. 1)

#### Domestic market issues

I have already discussed how the domestic market plays a key role in the illegal logging problem definition. Arguably, all interventions under the Ghana VPA will impact the domestic market, but a few are specifically targeted towards it. In 2013, as a direct follow-up to the VPA, the government of Ghana adopted a Strategic Plan for Addressing Illegal Chainsaw Activities (Ghana-EU, 2019). Two of the proposed interventions in this plan are of key importance for the domestic market: a public procurement policy and artisanal milling. I discuss each in turn starting with the public procurement policy.

Government agencies are the single largest consumer of timber products in Ghana, including large amounts of (illegal) chainsaw lumber. A public procurement policy stipulating that only timber produced in accordance with the timber legality definition should enter government projects and measures to ensure its compliance has been drafted, but today, eight years later, the strategy is yet to be adopted. To be fair, the focus on 'illegal' timber in public procurement seems to have had a positive impact, even if the policy is yet to be adopted (Obeng *et al.*, 2020).

Second, on the promotion of artisanal milling, this concept stipulates that chainsaw operators who currently supply the domestic market with 'illegal' lumber should receive financial support and training and equipped with transportable sawmills. These operators should, under arrangement with timber firms holding timber rights, work in concession areas to convert logs of species for which the conventional timber firms have no market, so called 'under-utilized species', and which the timber firms under normal circumstances would not cut, to lumber for the domestic market (Marfo & McKeown, 2013). The concept has been pilot-tested with

support from the EU, but it has not generated general traction (Obeng *et al.*, 2020; Sekyere *et al.*, 2018).<sup>7</sup> It should be added that even if uptake was successful, there is no way that artisanal millers would be able to supply but a tiny fraction of the lumber required on the domestic market. This is because the volumes of raw wood in the forests as 'under-utilized species' are simply not enough to meet the domestic demand. And why is it that the artisanal millers should suddenly be successful in marketing these species on the domestic market when the conventional firms cannot? The artisanal milling concept seems to rely on paradoxical assumptions on resource availability and 'business as usual' with high-value timber species exported and the domestic market as destination for what cannot be exported.

In conclusion, FLEGT has had limited progress in addressing the domestic market problems (Amoakuh, 2017). The domestic market issues are intimately related to the legal reform process, and the lack of progress here, as discussed above. The main effect of FLEGT on the domestic market in Ghana seems to stem from the VPA but from EUTR, which has forced Ghanaian timber firms to export less to the EU, more to Asia and to place more timber on the domestic market (Acheampong & Maryudi, 2020; Obeng *et al.*, 2020).

#### Consultation, participation and transparency

Many scholars agree that FLEGT has established an unprecedented platform for stakeholder engagement and policy dialogue (Beeko & Arts, 2010; Bollen & Ozinga, 2013; Overdevest & Zeitlin, 2018) (Overdevest and Zeitlin 2018, Bollen and Ozinga 2013, Beeko and Arts 2010).<sup>8</sup> The FLEGT Joint Monitoring and Review Mechanism (JMRRM) committee brings together representatives of public sector, civil society, private sector, and the EU. A Multi-Stakeholder Implementation Committee consisting of a larger number of representatives from the same groups, except the EU, oversees VPA implementation, provides a forum for dialogue, and feeds input to the JMRRM. There is a plethora of other committees, processes and networks, including the Legal Working Group, the Domestic Timber Trade Network and the National Forest Forum (Ghana-EU, 2019). These fora facilitate discussion, collaboration between actors, and place forest governance concerns on the agenda. Stakeholder engagement and policy dialogue are important, specific outcomes of FLEGT in their own right, and these outcomes should be acknowledged. Yet, as discussed above, thorny political issues concerning tree tenure, benefit sharing and domestic market remain unresolved.

Scholars also praise VPA implementation for its role in enhanced transparency and information sharing (Adams *et al.*, 2021). For example, the Forestry Commission has released information on holders, types and extent of timber rights; information that has never been in the public domain beforehand. The TRMLLR specifies a comprehensive list of information that the Forestry Commission should make available on its website or on request. To this effect, civil society has worked with the Forestry Commission to develop an online Ghana forest transparency portal (<https://ghanatimbertransparency.info/#/home>). Yet, there remains some way to go for the portal to provide reliable and up to date information on the Ghana forest sector.<sup>9</sup>

#### *Subjectification*

I argue that FLEGT assumes the existence of, and attempts to produce environmental subjects (Agrawal, 2005). These are citizens who (should) understand and appreciate the role of forests and the benefits and services that forests and trees provide: timber and other products, tax revenues, jobs, shade, moisture, water retention, biodiversity and more (MLNR, 2012). Environmental subjects, yes, but largely passive ones; not subjects with a large and active role in the management and governance of forests and trees. And it may be

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<sup>7</sup> It is noted that many chainsaw operators already use transportable sawmills, however not in the way that anticipated in the artisanal milling proposal.

<sup>8</sup> See also Acheampong and Maryudi who suggest that some sections of the timber industry consider themselves sidelined in the FLEGT discussions (Acheampong & Maryudi, 2020).

<sup>9</sup> In the process of writing this article, I tested the information availability stipulations in the TRMLLR. I asked the Forestry Commission in writing for access to the forest management plans for a few specific forest reserves (one of the sources of information mentioned in the TRMLLR). While the request was acknowledged and a response was promised, it never materialized after six months. This is just mentioned for information as it of course in itself is not representative.

seriously questioned how successful FLEGT, and forest governance in Ghana more generally, has been in shaping environmental subjects.

It may be overstating a bit to suggest that FLEGT builds on an assumption of ignorance of local people living close to the forests, but it is a fact there are few efforts to systematically include their knowledge, ideas and perceptions in the management. They often end up providing cheap labor rather than decision-making (Adjei *et al.*, 2020). Farmers could play a crucial role in planting and managing trees on-farm, but as discussed in the legal reform section, FLEGT has to date achieved little in terms of furthering such role.

FLEGT, like previous forest governance efforts in Ghana, privileges scientific knowledge and expertise on forests and forest management at the expense of other forms of knowledge, including local knowledge. FLEGT strengthens the position of experts, and in particular, the position of the Ghana Forestry Commission as the central organization holding scientific and managerial expertise on forests (Hirons *et al.*, 2018; Myers *et al.*, 2020; Rutt *et al.*, 2018). This position again relies on assumptions of the forest bureaucracy as knowledgeable and skilled, and the Forestry Commission as an institution working efficiently towards achieving set targets in a transparent and non-corrupt manner. There is an inherent paradox here, because these assumptions do not always hold true, testified by many activities devoted to capacity building, and the challenges that FLEGT implementation has faced, for example the timber legality verification system (EFI, 2021).

Let me close this brief discussion on subjectivities by some reflections on what broader positions FLEGT has shaped. In the section above, we have discussed how FLEGT has enhanced the level of consultation, participation and inclusion of civil society groups, NGOs, traditional rulers and the private sector in forest governance discussions. This have obviously strengthened their positions in the forest governance debate. Perhaps especially civil society groups and NGOs, whereas the private sector, and in particular the smaller firms ('loggers'), expresses more mixed views, and at least some feel that they have been sidelined (Acheampong & Maryudi, 2020). The traditional rulers (chiefs) constitute an important group because they are the custodians of land and hence key in any reform of land and tree tenure. Because FLEGT has not altered tree tenure, I argue that FLEGT has probably not significantly changed the position of chiefs. On the one hand, FLEGT recognizes chiefs as the traditional rulers and custodians of lands on behalf of the stools and because of FLEGT, chiefs now have a somewhat bigger role in approval of concessions and negotiation of SRAs. But on the other hand, FLEGT maintains chiefs as passive recipients of timber revenues, not as active agents of governance.

### *Counter practices*

It is of course not all actors who comply with the FLEGT regulations and stay within their assigned roles, largely as passive subjects! The most obvious example is the chainsaw operators who consistently violate the legislation; felling trees and producing lumber for the domestic market. They often, but not always, collaborate with chiefs, landowners and farmers in return for cash payment or other services (Hansen, 2011; Marfo, 2009; Ramcilovic-Suominen & Hansen, 2012). Seen from the point of view of the government, EU and FLEGT, chainsaw lumbering is an illegal act and the agents involved are criminals conducting immoral activities (Myers *et al.*, 2020). But many chainsaw operators and farmers consider the present legislative and administrative regime to lack legitimacy, and their acts, while certainly having a material element and scope, are at the same time counter practices; acts of resistance against a regime that compromises livelihoods and notions of social justice (Baruah, 2017; Maryudi *et al.*, 2020; Ramcilovic-Suominen & Hansen, 2012). While each single, isolated act of tree felling poses no threat to the regime, the combined effect of thousands of acts and operators, working day in and out, has a tremendous impact on it (Peluso, 1991; Scott, 1990). Counter practices in the form of tree felling by chainsaw operators, in collaboration with farmers and land-owners, are thus a very immediate threat and challenge to FLEGT implementation in Ghana. It should work as a constant reminder that FLEGT will not succeed without tree tenure reforms, but as the previous sections testify, this reality seems to be largely ignored, or shadowed by optimistic projections on what can be achieved through law enforcement.

There is yet another dimension of counter practices; one of compromise and accommodation (Johnson, 2019). Chainsaw lumbering could never have gained its current prominence without serious compromises and gaps in the way that the legislation and law enforcement is *actually* implemented. This includes acts of petty

corruption, that is, chainsaw operators, their financiers and middlemen who bribe forest officers and law enforcement officers from the forest to the market (Marfo, 2006). But it goes beyond this. The most illustrative example is the domestic lumber markets found in all urban centers and towns. Here chainsaw lumber is freely traded, day in and day out, visible to everybody, including law enforcement agents and politicians, and may even attract official market fees and levies. In other words, chainsaw lumber is fully accommodated in business and social life. This clashes with the aims of FLEGT; a paradox that of course has not gone unnoticed by the actors. In a similar way, the actions of established task forces involving forestry, police and military personnel to combat illegal logging provide an illusion of action rather than an effective response because actors often have been warned in advance or actions stopped before those apprehended have been punished (Franck & Hansen, 2014).

## 5. Conclusion

In this article, I have applied a governmentality analytical lens to examine FLEGT implementation in Ghana. I hope to have demonstrated how governmentality can be applied as a critical analytical tool; and a tool of relevance for political ecology. Such examination, as in the present case, may help illuminate how particular 'governmental' practices help stabilize existing power constellations and perpetuate inequalities and injustices. Used in this way, I argue that governmentality is far from the 'kathedernihilismus', or academic nihilism, a narrow and self-centered discussion of discourse and narrative with no practical (political) relevance, which the concept has been accused of (Merquior, 1985; Morton, 2010).

In the case of FLEGT in Ghana, I have shown how its focus on illegal logging and a particular understanding of the phenomenon relegates other issues, notable forest and tree tenure, and access and benefit sharing, to secondary positions. A particular knowledge production has helped consolidate illegal logging as the central problem while making some aspects of the issue (e.g. chainsaw operators) more visible than others. Other forms of knowledge production, for example the revision of outdated forest management plans, assist in consolidating the legitimacy of FLEGT and its *status quo*, ignoring underlying causes of the problem. I agree with proponents that the FLEGT narrative holds aspirations for broader governance and tenure reforms, but as the article has illustrated, these are yet to materialize. FLEGT has updated and revised certain procedures and practices – concession allocation, wood tracking and sector transparency – but important gaps remain in terms of appropriate incentives for actors (and in particular farmers) to nurture trees on farm and address the domestic market situation.

The analysis illustrates how multiple governmentalities are at play in FLEGT implementation in Ghana. The timber legality definition and TRMLLR builds on codified rules and enforcement of these rules, for example through the timber legality verification system. This is in line with a sovereign governmentality rationality. The inability of the Ghanaian state and its institutions to enforce the codified rules, and here we are talking over decades, testifies to the limits of this rationality. We also see elements of a neo-liberal governmentality at play. The timber legality verification is rationalized as an intervention that provides financial incentives for firms who comply with the legality standard, including through exports to the EU market, there are sanctions for those who do not. More stringent law enforcement under FLEGT combines elements of sovereign and neo-liberal rationalities because sanctions are supposed to act as an incentive for compliance.

The neo-liberal governmentality logic paradoxically falls short in relation to farmers and landowners. As policies currently stand, they remain without clear financial incentives to engage actively in planting and nurturing on-farm trees. A disciplinary governmentality is at play in attempts to shape environmental subjects with an appreciation of central, state-controlled forest conservation and its claimed economic and ecological benefits. The counter-practices, notably chainsaw lumbering, testify to the limits of this logic. Finally, I argue that FLEGT also draws significantly on a rationality of 'truth', because scientific forestry is applied more or less as a 'doxa', a set of guiding principles that is not questioned or contested. As we have seen, this has 'boxed' intervention in a narrow band, emphasizing state control and regulation, business as usual and with little room for innovation and new ways of thinking. The general acceptance of this paradigm across actors is remarkable – by firms, civil society, government agencies and donors, in Ghana, in EU and beyond – despite its many challenges.

In conclusion, I see in FLEGT implementation in Ghana a marked 'rendering technical' Tendency. The most concrete example, perhaps, is the timber legality verification system which turns complex and political issues into a technical matrix, manifested in the timber legality definition, amenable to government intervention. Second, as discussed above, is the privileged role it gives to (Western) techno-science, calculative mechanisms and intervention in line with a paradigm of scientific forestry. These features are not unique to Ghana or to FLEGT, but shared with many forestry interventions (McGregor *et al.*, 2015; Munro & Hiemstra-van der Horst, 2011; Oels, 2005). While framed as new and innovative, there are actually few new ideas in FLEGT. It is largely assembled from an existing repertoire, one largely relying on scientific forestry, a leading role of the state, materialized in the Ghana Forestry Commission, in forest management, and with minimal changes to tree tenure, or the roles and responsibilities of other actors, notably farmers and other people living in forests. Indeed, since the forest governance regime of Ghana was established during British colonial rule and remains in its main components more or less unchanged since then, and FLEGT implementation largely stabilizes this regime, a call for broader reforms is at the same time, inevitably, a call to decolonize forest governance (Trisos *et al.*, 2021).

With reference to the scholarly debate on FLEGT, this article largely agrees with scholars who take a more critical stand towards the program and the way it is currently implemented (Maryudi *et al.*, 2020; Myers *et al.*, 2020; Rutt *et al.*, 2018). My contribution is to point out its lack of true reform and its perpetuation of existing power, governance and management structures. I want to modify my conclusion in the sense that I agree and fully acknowledge that FLEGT implementation in Ghana has increased sector governance transparency, participation and involvement, especially of civil society actors (Cerutti *et al.*, 2020; Overdevest & Zeitlin, 2018). And this is an important and significant achievement. But it carries the risk that these groups become stakeholders within the program rather than (critical) outside observers (McGregor *et al.*, 2015, p. 146). I see in the FLEGT implementation in Ghana some indications of this, in the sense that dialogue and involvement has (not yet) lead to any fundamental changes.

What future for FLEGT, in Ghana and beyond? This is a relevant question considering the substantial efforts, resources and prestige that have been put into FLEGT over the past 15 years by the EU, governments in timber producing countries, donors, civil society and firms. There are indications that policy makers, in EU and partner countries alike, are becoming increasingly impatient and frustrated with progress, notably the lack of FLEGT licenses, and may consider terminating the program, or part of it, notably the VPAs (FERN, 2021). This would fall in line with the argument that FLEGT is a 'fad' (Rutt *et al.*, 2018). But I want to end this article on a more optimistic note, by suggesting that it may still be possible to capitalize on the positive developments that FLEGT has evidently produced. It would require a more realistic view on the challenges ahead, the time needed to address them, and most importantly, greater awareness and attention to the inherent political, rather than technical, nature of the key challenges. I hope that this article can contribute to needed discussion on these challenges. Change does not happen without action. I see in particular a need for civil society, internationally and in Ghana, to change their position from one of uncritical praise of the success and achievements of FLEGT, including their own (!), to a more critical stance on the challenges of forest governance and FLEGT; challenges and paradoxes that I have tried to illustrate and discuss in this article.

## References

- Acheampong, E., & Maryudi, A. (2020). Avoiding legality: Timber producers' strategies and motivations under FLEGT in Ghana and Indonesia. *Forest Policy and Economics*, 111, 102047. <https://doi.org/10.1016/j.forpol.2019.102047>
- Adams, M. A., Kayira, J., Gruber, J. S., Idemudia, U., Tegegne, Y. T., Nantogmah Attah, A., Tuokuu, F. X. D., & Ansong, M. (2021). Good governance practices in Ghana's FLEGT voluntary partnership agreement process: an application of Q methodology. *Journal of Environmental Policy & Planning*, 23(1), 1–15. <https://doi.org/10.1080/1523908X.2020.1784116>
- Adjei, P. O.-W., Agyei, F. K., & Adjei, J. O. (2020). Decentralized forest governance and community representation outcomes: analysis of the modified taungya system in Ghana. *Environment, Development and Sustainability*, 22(2), 1187–1209. <https://doi.org/10.1007/s10668-018-0243-7>

- Afriyie, K., & Abass, K. (2020). Profiting from illegality: A discursive analysis of the chainsaw operation in rural Ghana. *Forest Policy and Economics*, 115, 102174. <https://doi.org/10.1016/j.forpol.2020.102174>
- Agrawal, A. (2005). *Environmentality. Technologies of government and the making of subjects*. Duke University Press.
- Agyei, F. K., & Adjei, P. O.-W. (2017). Representation without accountability in forestry: experiences from the Social Responsibility Agreement in Ghana. *Forest Policy and Economics*, 80, 34–43. <https://doi.org/10.1016/j.forpol.2017.03.003>
- Ahlborg, H., & Nightingale, A. J. (2018). Theorizing power in political ecology: The "where" of power in resource governance projects. *Journal of Political Ecology*, 25(1), 381–401. <https://doi.org/https://doi.org/10.2458/v25i1.22804>
- Akapame, C. K. (2020). The chase for legal timber: Developments in the commercial trade of timber in Ghana. *Environmental Law Review*, 22(3), 198–214. <https://doi.org/10.1177%2F1461452920934704>
- Akapme, C. K. (2016). *Development of a framework on tree tenure and benefit sharing scheme (legal reform proposals). Final report*. Ministry of Lands & Natural Resources, Ghana.
- Amoakuh, K. (2017). *Barking up the wrong tree? Challenges to implementing a timber legality verification scheme in Ghana*. Senior Thesis. Princeton University.
- Antwi, Y. A., Roth, M., & O'Sullivan, R. (2018). *Tree tenure and benefit sharing policy reform in cocoa growing areas in Ghana*. USAID. [https://land-links.org/wp-content/uploads/2018/03/USAID\\_Land\\_Tenure\\_TGCC\\_Tree\\_Tenure\\_Benefit\\_Sharing\\_Cocoa\\_Growing\\_Areas\\_in\\_Ghana.pdf](https://land-links.org/wp-content/uploads/2018/03/USAID_Land_Tenure_TGCC_Tree_Tenure_Benefit_Sharing_Cocoa_Growing_Areas_in_Ghana.pdf)
- Arts, B. J. M., & Visseren-Hamakers, I. (2012). Forest governance: a state of the art review. In Arts, B., van Bommel, S., Ros-Tonen, M., & Verschoor, G. (Eds.), *Forest-people interfaces: Understanding community forestry and biocultural diversity* (pp. 241–266). Wageningen Academic Publishers.
- Baruah, M. (2017). *Cocoa and carbon: Remediating forest governance through community participation in a Redd+ pilot in Ghana*. PhD Dissertation. University of South Carolina.
- Beeko, C., & Arts, B. (2010). The EU-Ghana VPA: a comprehensive policy analysis of its design. *International Forestry Review*, 12(3), 221–230.
- Beinart, W., & Hughes, L. (2007). Resistance to colonial conservation and resource management. In Beinart, W., & Hughes, L. *Environment and Empire*. Oxford University Press.
- Birikorang, G. (2015). [\*Why don't we make the logger pay? Stumpage value and policy failure in Ghana's forest sector\*](#). International Institute for Environment and Development & Civic Response.
- Birikorang, G., Okai, R., & Asenso-Okyere, K. (2001). *Ghana wood industry and log export ban study*. Forestry Commission, Accra, Ghana.
- Blundo, G., Olivier de Sardan, J.-P., Arifari, N. B., & Alou, M. T. (2006). *Everyday corruption and the state. Citizens and public officials in Africa*. Zed Books.
- Bluwstein, J. (2018). From colonial fortresses to neoliberal landscapes in Northern Tanzania: a biopolitical ecology of wildlife conservation. *Journal of Political Ecology*, 25(1), 144–168. <https://doi.org/https://doi.org/10.2458/v25i1.22865>
- Boakye, J. (2015). Estimation of illegal logging by the formal timber sector in Ghana: implications for forest law compliance, enforcement and EU-Ghana voluntary partnership agreement. *International Forestry Review*, 17(2), 117–127.
- Bollen, A., & Ozinga, S. (2013). [\*Improving forest governance: A comparison of FLEGT VPAs and their impact\*](#). FERN.
- Carlsen, K. (2014). Constructing a legitimate argument: Narrative techniques in the Ghana-EU VPA. *Forest Policy and Economics*, 48(1), 63–71. <https://doi.org/10.1016/j.forpol.2014.09.017>
- Carlsen, K., & Hansen, C. P. (2014). Rent-seeking and timber rights allocation in Ghana. *International Forestry Review*, 16(6), 537–548. <https://doi.org/10.1505/146554814814095375>

- Cashore, B., & Stone, M. W. (2012). Can legality verification rescue global forest governance? Analyzing the potential of public and private policy intersection to ameliorate forest challenges in Southeast Asia. *Forest Policy and Economics*, 18, 13–22.
- Cashore, B., & Stone, M. W. (2014). Does California need Delaware? Explaining Indonesian, Chinese, and United States support for legality compliance of internationally traded products. *Regulation and Governance*, 8(1), 49–73. <https://doi.org/10.1111/rego.12053>
- Cavanagh, C. J. (2018). Political ecologies of biopower: diversity, debates, and new frontiers of inquiry. *Journal of Political Ecology*, 25(1), 402–425. <https://doi.org/https://doi.org/10.2458/v25i1.23047>
- Cavanagh, C. J., & Benjaminsen, T. A. (2015). Guerrilla agriculture? A biopolitical guide to illicit cultivation within an IUCN Category II protected area. *The Journal of Peasant Studies*, 42(3–4), 725–745.
- Cerutti, P. O., Goetghebuer, T., Leszczynska, N., Dermawan, A., Newbery, J., Eckebil, P. P. T., & Tsanga, R. (2021). Voluntary Partnership Agreements: Assessing impacts for better policy decisions. *Forest Policy and Economics*, 124, 102386. <https://doi.org/10.1016/j.forpol.2020.102386>
- Cerutti, P. O., Goetghebuer, T., Leszczynska, N., Newbery, J., Breynne, J., Dermawan, A., Mauquoy, C., Tabi, P. P., Tsanga, R., & Der Ploeg, L. V. (2020). [\*Collecting evidence of FLEGT-VPA impacts for improved FLEGT communication\*](#). Synthesis Report. CIFOR.
- Collier, S. J. (2009). Topologies of power: Foucault's analysis of political government beyond "governmentality." *Theory, Culture & Society*, 26(6), 78–108.
- Danso, E., & Opoku, K. (2004). *Legality and impacts of forest utilisation permits in Ghana*. IIED.
- Dean, M. M. (2009). *Governmentality: Power and rule in modern society*. Sage.
- Dove, M. R., & Kammen, D. M. (2015). *Science, society and the environment: Applying anthropology and physics to sustainability*. Routledge.
- EFI. (2021). *Map of FLEGT projects*. <http://www.flegt.org/map-of-projects/#countries/GHA>
- EU-Ghana. (2010). [\*Voluntary Partnership Agreement between the European Community and the Republic of Ghana on forest law enforcement, governance and trade in timber products into the Community\*](#). *Official Journal of the EU*, 53, 1-75 L 70/31, 19.3. 2010.
- EU. (2003). *Communication from the Commission to the Council and the European Parliament - Forest Law Enforcement, Governance and Trade (FLEGT) - Proposal for an EU Action Plan (COM/2003/0251 final)*.
- EU FLEGT Facility. (2017). *About the FLEGT licence*. EU FLEGT. <http://www.flegtlicence.org/aboutthe-%0Aflegt-licence%0A>
- EU FLEGT Facility. (2021a). *Ghana and EU finalise assessment of Ghana Timber Legality Assurance System*. EU FLEGT. [https://www.euflegt.efi.int/ghana-news/-/asset\\_publisher/FWJBFn3Zu1f6/content/ghana-and-eu-finalise-assessment-of-ghana-timber-legality-assurance-system](https://www.euflegt.efi.int/ghana-news/-/asset_publisher/FWJBFn3Zu1f6/content/ghana-and-eu-finalise-assessment-of-ghana-timber-legality-assurance-system)
- EU FLEGT Facility. (2021b). *Voluntary Partnership Agreements*. EU FLEGT. <https://www.euflegt.efi.int/vpa>
- FAO, & UNEP. (2020). [\*The State of the World's Forests 2020. Forests, biodiversity and people\*](#). Food and Agricultural Organization of the United Nations (FAO); United Nations Environment Programme (UNEP).
- Ferguson, J. (1994). *The anti-politics machine. Development, depoliticization, and bureaucratic power in Lesotho*. University of Minnesota Press.
- FERN. (2021). *Ghana's VPA process: The rising tide that lifts all ships*. Fern. <https://www.fern.org/publications-insight/ghanas-vpa-process-the-rising-tide-that-lifts-all-ships-2333/>
- Fletcher, R. (2010). [\*Neoliberal environmentalism: Towards a poststructuralist political ecology of the conservation debate\*](#). *Conservation and Society*, 8(3), 171–181.
- Fletcher, R. (2017). Environmentalism unbound: Multiple governmentalities in environmental politics. *Geoforum*, 85, 311–315. <https://doi.org/10.1016/j.geoforum.2017.06.009>
- Foucault, M. (2007). *Security, territory, population: Lectures at the Collège de France, 1977-78*. Palgrave MacMillan.

- Foucault, M. (2008). *The birth of biopolitics*. Picador/Palgrave Macmillan.
- Franck, M., & Hansen, C. P. (2014). How effective are task forces in tackling illegal logging? Empirical evidence from Ghana. *International Forestry Review*, 16(3), 354-362.
- Ghana-EU. (2019). [Progress report 2013-2017. Implementation of the Ghana-EU FLEGT Voluntary Partnership Agreement](#). Joint Monitoring and Review Mechanism Secretariat Ghana-EU FLEGT Voluntary Partnership Agreement.
- Gordon, C. (1991). Governmental rationality: an introduction. In G. Burcell, Gordon, C. & Miller, P. (Eds.), *The Foucault effect. Studies in governmentality* (pp. 1–53). The University of Chicago Press.
- Guha, R. (1989). Saboteurs in the forest: Colonialism and peasant resistance in the Indian Himalaya. In Colburn, F. D. (Ed.), *Everyday forms of peasant resistance* (pp. 64–92). M.E. Sharpe.
- Hajjar, R. (2015). Advancing small-scale forestry under FLEGT and REDD in Ghana. *Forest Policy and Economics*, 58, 12–20.
- Hansen, C. P. (2011). Forest law compliance and enforcement: The case of on-farm timber extraction in Ghana. *Journal of Environmental Management*, 92(3), 575–586. <https://doi.org/10.1016/j.jenvman.2010.09.021>
- Hansen, C. P., Damnyag, L., Obiri, B. D., & Carlsen, K. (2012). Revisiting illegal logging and the size of the domestic timber market: the case of Ghana. *International Forestry Review* 14(1), 39–49. <https://doi.org/10.1505/146554812799973181>
- Hansen, C. P., & Lund, J. F. (2011). [The political economy of timber taxation: The case of Ghana](#). *Forest Policy and Economics*, 13(8), 630–641.
- Hansen, C. P., & Lund, J. F. (2017). Imagined forestry: The history of the scientific management of Ghana's High Forest Zone. *Environment and History*, 23(1), 3–38. <https://doi.org/10.3197/096734017X14809635325548>
- Hansen, C. P., Pouliot, M., Marfo, E., Obiri, B. D., & Treue, T. (2015). Forests, timber and rural livelihoods: Implications for social safeguards in the Ghana-EU Voluntary Partnership Agreement. *Small-Scale Forestry*, 14(4), 401-422. <https://doi.org/10.1007/s11842-015-9295-9>
- Hansen, C. P., Rutt, R., & Acheampong, E. (2018). ['Experimental' or business as usual? Implementing the European Union Forest Law Enforcement, Governance and Trade \(FLEGT\) Voluntary Partnership Agreement in Ghana](#). *Forest Policy and Economics*, 96, 75-82.
- Hansen, C. P., & Treue, T. (2008). Assessing illegal logging in Ghana. *International Forestry Review*, 10(4), 573–590. <https://doi.org/10.1505/ifor.10.4.573>
- Hirons, M., McDermott, C., Asare, R., Morel, A., Robinson, E., Mason, J., Boyd, E., Malhi, Y., & Norris, K. (2018). [Illegality and inequity in Ghana's cocoa-forest landscape: How formalization can undermine farmers control and benefits from trees on their farms](#). *Land Use Policy*, 76, 405–413.
- JMRM. (2019). *Aide Memoire. Meeting of the Joint Monitoring and Review Mechanism. Accra, 14 and 15 May 2019*. Secretariat of the Joint Monitoring and Review Mechanism of the Ghana-EU FLEGT VPA.
- Johnson, M. F. (2019). Who governs here? Informal resource extraction, state enforcement, and conflict in Ghana. *Global Environmental Change*, 58, 101959. <https://doi.org/10.1016/j.gloenvcha.2019.101959>
- Jonsson, R., Giurca, A., Masiero, M., Pepke, E., Pettenella, D., Prestemon, J., & Winkel, G. (2015). [Assessment of the EU timber regulation and FLEGT action plan](#). From Science to Policy. European Forest Institute.
- Kjær, A. M. (2004). *Governance*. Polity.
- Kleinschmit, D. A., Wildburger, S., & Purret, A. C. (2016). [Illegal logging and related timber trade – Dimensions, drivers, impacts and responses. A global scientific rapid response assessment report](#). International Union of Forest Research Organizations.
- Kumeh, E. M., & Abu, D. K. (2019). A reality check: unveiling the unseen faces of SRA compliance in Ghana. *International Forestry Review*, 21(4), 446–459. <https://doi.org/10.1505/146554819827906843>
- Leipold, S., & Winkel, G. (2016). Divide and conquer: Discursive agency in the politics of illegal logging in the United States. *Global Environmental Change*, 36, 35–45. <https://doi.org/10.1016/j.gloenvcha.2015.11.006>

- Lesniewska, F., & McDermott, C. L. (2014). FLEGT VPAs: Laying a pathway to sustainability via legality lessons from Ghana and Indonesia. *Forest Policy and Economics*, 48, 16–23. <https://doi.org/10.1016/j.forpol.2014.01.005>
- Li, T. M. (2007a). [Governmentality](#). *Anthropologica*, 49(2), 275–281.
- Li, T. M. (2007b). [Practices of assemblage and community forest management](#). *Economy and Society*, 36(2), 263–293.
- Li, T. M. (2007c). *The will to improve. Governmentality, development and the practice of politics*. Duke University Press.
- Marfo, E. (2006). [Powerful relations: The role of actor-empowerment in the management of natural resource conflicts. A case of forest-related conflicts in Ghana](#). PhD dissertation. Wageningen University.
- Marfo, E. (2009). [Chainsaw milling in Ghana: An overview of issues](#). Tropenbos International.
- Marfo, E. (2010). [Chainsaw milling in Ghana: Context, drivers and impacts](#). Tropenbos International.
- Marfo, E., & McKeown, J. P. (2013). Negotiating the supply of legal timber to the domestic market in Ghana: Explaining policy change intent using the Advocacy Coalition Framework. *Forest Policy and Economics*, 32, 23–31.
- Marfo, E., Owusu, F. W., & Damnyag, L. (2016). *Domestic timber markets and trade in Ghana*. Tropenbos International.
- Maryudi, A., Acheampong, E., Rutt, R. L., Myers, R., & Dermott, C. L. (2020). "A level playing field"? What an environmental justice lens can tell us about who gets leveled in the Forest Law Enforcement, Governance and Trade Action Plan. *Society & Natural Resources*, 33(7), 859–875. <https://doi.org/10.1080/08941920.2020.1725201>
- McDermott, C. L., Hiron, M., & Setyowati, A. (2020). The interplay of global governance with domestic and local access: Insights from the FLEGT VPAs in Ghana and Indonesia. *Society & Natural Resources*, 33(2), 261–279.
- McElwee, P. D. (2016). *Forests are gold: Trees, people, and environmental rule in Vietnam*. University of Washington Press.
- McGregor, A., Challies, E., Howson, P., Astuti, R., Dixon, R., Haalboom, B., Gavin, M., Tacconi, L., & Afiff, S. (2015). Beyond carbon, more than forest? REDD+ governmentality in Indonesia. *Environment and Planning A: Economy and Space*, 47(1), 138–155.
- Merquior, J. G. (1985). *Foucault*. Fontana.
- MLFM. (2005). *The true cost of legal timber. VPA Discussion Paper 1* (p. ). Ministry of Lands, Forestry and Mines.
- MLFM. (2007). *Ghana's entry into a Voluntary Partnership Agreement with the EU. VPA Briefing Paper 1*. Ministry of Lands, Forestry and Mines.
- MLNR. (2012). *Ghana Forest and Wildlife Policy*. Ministry of Land and Natural Resources, Ghana.
- MLNR. (2016a). *Forestry Development Master Plan*. Ministry of Land & Natural Resources, Ghana.
- MLNR. (2016b). *Tree tenure & benefit sharing framework in Ghana*. Ministry of Lands & Natural Resources, Ghana.
- Morton, J. (2010). Why should governmentality matter for the study of pastoral development? *Nomadic People*, 14(1), 6–30.
- Munro, P. G., & Hiemstra-van der Horst, G. (2011). [Conserving exploitation? A political ecology of forestry policy in Sierra Leone](#). *The Australasian Review of African Studies*, 32, 59–78.
- Myers, R. (2020). *What happened to Indonesia's timber legality verification system?* Dala Institute. [https://www.dala.institute/post/svlg\\_2020](https://www.dala.institute/post/svlg_2020)
- Myers, R., Rutt, R. L., McDermott, C., Maryudi, A., Acheampong, E., Camargo, M., & Càm, H. (2020). Imposing legality: hegemony and resistance under the EU Forest Law Enforcement, Governance, and Trade (FLEGT) initiative. *Journal of Political Ecology*, 27(1), 125–149. <https://journals.librarypublishing.arizona.edu/jpe/article/id/2225/>

- Nathan, I., Chen, J., Hansen, C. P., Xu, B., & Li, Y. (2018). Facing the complexities of the global timber trade regime: How do Chinese wood enterprises respond to international legality verification requirements, and what are the implications for regime effectiveness? *Forest Policy and Economics*, 92, 169-180.
- Nathan, I., Hansen, C. P., & Cashore, B. (2014). Timber legality verification in practice: Prospects for support and institutionalization. *Forest Policy and Economics*, 48(1), 1-5.
- Obeng, E. A., Oduro, K. A., Seidu, M., Asomaning, G., & Owusu, F. W. (2020). [\*Bottlenecks to supplying legal wood to the domestic market\*](#). Tropenbos International and Nature & Development Foundation.
- Obiri, B. D., Marfo, B. D., Damnyag, L., Nutakor, E., Agyemang, V., & Ofori, J. (2009). *Supply and demand for lumber on the Ghanaian domestic market*. Forest Research Institute of Ghana.
- Oels, A. (2005). Rendering climate change governable: From biopower to advanced liberal government? *Journal of Environmental Policy & Planning*, 7(3), 185-207.
- Overdevest, C., & Zeitlin, J. (2014a). Assembling an experimentalist regime: Transnational governance interactions in the forest sector revisited. In Bruszt, L. and McDermott, G. A. (eds.). *Leveling the playing field: Transnational regulatory integration and development*. Oxford University Press.
- Overdevest, C., & Zeitlin, J. (2014b). Assembling an experimentalist regime: Transnational governance interactions in the forest sector. *Regulation & Governance*, 8(1), 22-48. <https://doi.org/10.1111/j.1748-5991.2012.01133.x>
- Overdevest, C., & Zeitlin, J. (2014c). Constructing a transnational timber legality assurance regime: Architecture, accomplishments, challenges. *Forest Policy and Economics*, 48, 6-15.
- Overdevest, C., & Zeitlin, J. (2015). Forest Law Enforcement Governance and Trade (FLEGT): transnational dynamics of an EU experimentalist regime. In Zeitlin, J. (Ed.), *Extending Experimentalist Governance?* Oxford University Press.
- Overdevest, C., & Zeitlin, J. (2016). Experimentalism in transnational forest governance: Implementing EU Forest Law Enforcement Governance and Trade (FLEGT) Voluntary Partnership Agreements in Indonesia and Ghana. ACCESS EUROPE Research Paper No. 2016/02.
- Overdevest, C., & Zeitlin, J. (2018). Experimentalism in transnational forest governance: Implementing European Union Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreements in Indonesia and Ghana. *Regulation and Governance*, 12(1), 64-87. <https://doi.org/10.1111/rego.12180>
- Ozinga, S., & Leal, I. L. (2010). *Forest Watch Special – VPA Update October 2010*. FERN.
- Peluso, N. L. (1991). *Rich forests, poor people. Resource control and resistance in Java*. University of California Press.
- Ramcilovic-Suominen, S., & Hansen, C. P. (2012). Why some forest rules are obeyed and others violated by farmers in Ghana: Instrumental and normative perspective of forest law compliance. *Forest Policy and Economics*, 23, 46-54.
- Rayner, J., Buck, A., & Katila, P. (2010). [\*Embracing complexity: Meeting the challenges of international forest governance. A Global Assessment Report\*](#). International Union of Forest Research Organizations.
- Rose, N. (1999). *Powers of freedom. Reframing political thought*. Cambridge University Press.
- Rose, N., & Miller, P. (2010). Political power beyond the State: Problematics of government. *British Journal of Sociology*, 61(SUPPL. 1), 271-303.
- Rutt, R. L., Myers, R., Ramcilovic-Suominen, S., & McDermott, C. (2018). FLEGT: Another 'forestry fad'? *Environmental Science and Policy*, 89, 266-272. <https://doi.org/10.1016/j.envsci.2018.08.012>
- Satyral, P. (2018). Civil society participation in REDD+ and FLEGT processes: Case study analysis from Cameroon, Ghana, Liberia and the Republic of Congo. *Forest Policy and Economics*, 97, 83-96.
- Scott, J. C. (1989). Everyday forms of resistance. In F. D. Colburn (Ed.), *Everyday forms of peasant resistance* (pp. 3-33). M.E. Sharpe.
- Scott, J. C. (1990). *Domination and the arts of resistance: Hidden transcripts*. Yale University Press.

- Scott, J. C. (1998). *Seeing like a state: how certain schemes to improve the human condition have failed*. Yale University Press.
- Sekyere, K. F., Kumeh, E. M., & Nketiah, K. S. (2018). *Source book on small-scale timber milling firms in Ghana: Potential artisanal mills*. Tropenbos International.
- Svarstad, H., Benjaminsen, T. A., & Overå, R. (2018). Power theories in political ecology. *Journal of Political Ecology*, 25(1), 350–363. <https://doi.org/10.2458/v25i1.23044>
- Teye, J. (2013). Corruption and illegal logging in Ghana. *International Development Planning Review*, 35(1), 1–19.
- Trisos, C. H., Auerbach, J., & Katti, M. (2021). Decoloniality and anti-oppressive practices for a more ethical ecology. *Nature Ecology & Evolution*, 5(9), 1205–1212.
- Van Heeswijk, L., & Turnhout, E. (2013). The discursive structure of FLEGT (Forest Law Enforcement, Governance and Trade): The negotiation and interpretation of legality in the EU and Indonesia. *Forest Policy and Economics*, 32, 6–13.