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ANALYSIS OF EUROPEAN UNION FOREST LAW ENFORCEMENT, GOVERNANCE, AND TRADE EFFICACY: A MULTI-SCALE PERSPECTIVE

A Dissertation

Presented to the Faculty of
Antioch University New England

In partial fulfillment for the degree of DOCTOR OF PHILOSOPHY

by

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ANALYSIS OF EUROPEAN UNION FOREST LAW ENFORCEMENT, GOVERNANCE, AND TRADE EFFICACY: A MULTI-SCALE PERSPECTIVE

This dissertation, by Marshall Alhassan Adams, has been approved by the committee members signed below who recommend that it be accepted by the faculty of Antioch University New England in partial fulfillment of requirements for the degree of

DOCTOR OF PHILOSOPHY

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Abstract

ANALYSIS OF EUROPEAN UNION FOREST LAW ENFORCEMENT, GOVERNANCE, AND TRADE EFFICACY: A MULTI-SCALE PERSPECTIVE

Marshall Alhassan Adams

Antioch University New England

Keene, New Hampshire

Since the 1992 United Nations Conference on Environment and Development (UNCED), the international community has launched several policy initiatives to address complex environmental problems, in particular illegal logging. One such initiative is the European Union (EU) Forest Law Enforcement, Governance, and Trade (FLEGT) Action Plan and its Voluntary Partnership Agreements (VPAs). The scholarship on FLEGT has overwhelmingly focused on technical and governance aspects, drawing largely from a single institutional analysis theory. However, there is scant empirical research on a range of theories to understand FLEGT efficacy from a multi-scalar governance perspective. My dissertation research contributes to a multiscalar forest governance analysis approach to FLEGT efficacy by using two strands of concepts—namely policy coherence and institutional capacity for good governance—to answer three of the most critical and under-researched questions: (a) How do the New York Declaration on Forests (NYDF) and the United Nations Strategic Plan on Forests (UNSPF) interlink with the FLEGT Action Plan at policy objective and policy instrument levels? (b) What are the potential and realized capacities of VPA processes for advancing principles of good forest governance and implementation of a Timber Legality Assurance System (TLAS) in Cameroon, Central African Republic (CAR), Republic of the Congo (Congo), Ghana, and Liberia? (c) What are the different stakeholders' perspectives on good governance as applied to VPA in Ghana?

My dissertation is comprised of three interlinked studies with different methodological designs. An in-depth comparative analysis was employed to examine interlinkages among FLEGT, NYDF, and UNSPF (Chapter 2) and institutional capacity of the VPA process in Cameroon, CAR, Congo, Ghana, and Liberia (Chapter 3) using a review of policy documents. The review of policy documents was complemented with focal point interactions and meta-analysis of VPA cases for Chapter 3. Q methodology was used to examine stakeholder perspectives on good forest governance in Ghana (Chapter 4).

The results show that FLEGT, NYDF, and UNSPF share inherent interlinkages of policy instruments such as information sharing, strategic plans, financial resources, and technical capacity support. The presence of common strategic agendas on finance for forests and good forest governance in FLEGT, NYDF, and UNSPF demonstrate cross-institutional coordination through the prioritization of policy instruments (Chapter 2). Managing interlinkages within the larger climate change governance architecture requires inter-institutional learning and international cooperation in the light of identified strategic agendas. The results also show that potential capacities exist for advancing governance and implementing TLAS, but that complex socio-political and technical challenges limit the realization of their capacities. These challenges have constrained the effective implementation of the VPA process. Political will and capacity building can impact on the realization of capacities (Chapter 3). Furthermore, the results reveal three distinct perspectives among stakeholders within Ghana's VPA process, highlighting areas of disagreement or tension among key stakeholders. Engaging with and shaping these perspectives is an instrumentally and normatively appropriate governance action to advance the VPA in Ghana (Chapter 4). The results point to the fundamental conclusion that additional institutional efforts are needed to advance FLEGT globally and to achieve the VPA in Africa and beyond. This dissertation is available in open access at AURA, http://aura.antioch.edu/ and OhioLINK ETD Center, https://etd.ohiolink.edu/etd.

Keywords: Good forest governance, FLEGT VPA, capacity, Q methodology, sub-Saharan Africa

Dedication

To Mackayla Azume	Attah and Myla	Tani Attah, with	gratitude for your	love and bonhomie.

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Chapter 1: Introduction

The destruction of the world's primary forests is a recognized byproduct of the development of modern society (Brack, 2003). The underlying causes of destructive forest uses include, but are not limited to, poor governance (e.g., corruption), technological issues (e.g., weak enforcement and monitoring capacities), sociocultural issues (e.g., population growth and Neolithic modes of subsistence, namely cultivation and cattle herding), and economic issues (e.g., global demand for forest and agricultural commodities) that undervalue forests and the actual cost of damages associated with unsustainable forest activities (Duguma et al., 2019; Gupta et al., 2013; Pokorny et al., 2016, Siiriäinen, 2000).

Many of the underlying drivers of deforestation mentioned above "lie outside" the forest sector and are deeply rooted in wider socioeconomic issues that bring higher and more rapid financial returns (United Nations Forum on Forests—UNFF, 2017a; van Dam, 2019). These underlying causes—such as the conversion of forest lands to planned infrastructure development, agriculture (oil palm and cash crops), and mining—result in forest degradation (Humphreys et al., 2019; Maguire, 2013). Thus, it is becoming increasingly crucial to synchronize global forest initiatives and other sectors, such as agriculture, mining, and infrastructural development, in order to effectively govern the world's forests (Food and Agricultural Organization of the United Nations—FAO, 2018).

The above challenges, in particular deforestation and illegal logging, have led to a plethora of international interventions, such as the European Union (EU) Forest Law Enforcement, Governance, and Trade (FLEGT), the New York Declaration on Forests (NYDF), and the United Nations Strategic Plan for Forests (UNSPF) 2017–2030. This proliferation itself

and the nature of illegal logging call for policy coherence¹ among global forest-related policies to achieve the larger goal of sustainable forestry (Cashore & Nathan, forthcoming).

To contribute toward this larger goal, my overall research aim was (a) to better understand the interlinkages among FLEGT, NYDF, and UNSPF at the global level, (b) to assess a set of five Voluntary Partnership Agreement (VPA²) countries in sub-Saharan Africa regarding their critical capacity deficits that must be dealt with if implementation progress is to be made at the regional level, and (c) to examine at a country-specific level how the principles of good governance are applied to Ghana's VPA process. Thus, the approach I took was to critically examine FLEGT efficacy from a multi-scalar governance perspective so as to address the following under-researched questions, using a case study approach:

- 1. How do the NYDF and UNSPF interlink with the FLEGT Action Plan at two critical policy levels, namely policy objective and policy instrument?
- 2. Focusing on priorities set out in the VPAs, what are the potential and realized capacities of VPA partner countries for advancing principles of good governance and implementing a Timber Legality Assurance System (TLAS) in Cameroon, Central African Republic (CAR), Ghana, Liberia, and Republic of the Congo (Congo)?

¹ As discussed in Chapter 2, throughout this dissertation, policy coherence is associated with "interlinkages" of policy objectives and policy instruments of overlapping international regimes. "Interlinkages" denotes logical consistency among overlapping or related international forest regimes, based on their mere existence (et al., 2018).

² VPAs are a key component of the FLEGT Action Plan to address illegal logging and foster good forest governance (EU FLEGT Facility, 2020a). Each VPA is a bilateral trade agreement between the EU and a timber-exporting country (hereinafter VPA partner country) involved in timber production and exportation to the EU, within the framework of the FLEGT Action Plan (EU FLEGT Facility, 2020a). A VPA TLAS ensures that timber and timber products imported into the EU from a partner country, comply with the national government laws (EU FLEGT Facility, 2020a).

3. What are the different stakeholders' perspectives on good governance as applied to the VPA in Ghana?

Background and Context

In 2015, the world had almost 4 billion hectares of forest (FAO, 2018). Even though this forest area has decreased over the last 25 years, the rate of forest area net loss declined by 50% between 2010 and 2015 (FAO, 2018). Of this total forest area, natural forests account for 93% or 3.7 billion hectares (FAO, 2018). In the past four decades, the area of planted forests has increased by 105 million hectares (FAO, 2018).

A recent review by Chatham House indicated that average annual tropical forest loss accelerated by 44% between 2014 and 2018 (Glover, 2020). The vast majority of forest loss is occurring in the tropics—about 15.8 million hectares annually (Tegegne, 2016; Weisse & Goldman, 2018). Of relevance to this section is that the failure of institutional structures and governance processes (e.g., weak rule of law and enforcement, unsecured property rights) is linked to deforestation and forest degradation in developing countries (Gupta et al., 2013; Maguire, 2013). Furthermore, the increasing per capita demand for timber in the developing world is another leading driver of deforestation and forest degradation (Damette & Delacote, 2011).

Globally, studies agree that another major cause of the loss and degradation of tropical forests is illegal logging (Hoare, 2015; Glover, 2020), in which timber is "harvested, transported, processed, bought, or sold in violation of national, [and] international laws (Vandenhaute et al., 2014, p. 10). Illegal logging extends to non-compliance with national laws and related international regulations at any point along the timber supply chain (Glover, 2020).

Consequently, the world's forests remain under serious threat from illegal logging and other illegal forest activities (Hoare, 2015). For instance, forests in the Amazon Basin, Central Africa, Southeast Asia, and the Russian Federation are significantly threatened by illegal logging and related trade (Brack, 2003; Bojang, 2012; Pokorny et al., 2016). Like deforestation, the problem of illegal logging across these regions is directly related to inadequate law enforcement capacity, a lack of economic incentives for legal compliance, a lack of political will, and deeprooted corruption (Pokorny et al., 2016; Tacconi, 2012).

The Amazon Basin in South and Central America has the largest continuous tropical forest on Earth and as such has global significance in terms of biodiversity and climate change mitigation (Gupta et al., 2013). However, the region also has the highest rates of illegal logging (Nellemann, 2012; Tacconi, 2012), followed by Africa (Bojang, 2012). Regarding Africa, evidence suggests that approximately 70–90% of all harvested timber on that continent is illegal (Blaser & Zabel, 2015; Turner et al., 2007). The perpetrators and major beneficiaries of illegal logging and related activities—such as chainsaw operators and multinational corporations—are accountable and liable for illegal transactions (Acheampong & Maryudi, 2020; Glück et al., 2010; Pokorny et al., 2016). According to Ramcilovic-Suominen and Hansen (2012), such noncompliance behavior is influenced by numerous normative factors—for example, societal values, principles, and norms—and instrumental factors, for instance the perceived fairness of rules. These sources of non-compliance, in particular weak governance capacity, are important reasons for the large amount of illegal logging in developing regions such as Africa (Nellemann, 2012; Pepke et al., 2016; Tacconi, 2012; Pokorny et al., 2016; Ramcilovic-Suominen & Epstein, 2012).

With respect to the scale of illegal logging in the Congo Basin, which is the world's second largest tropical rainforest (Rainforest Foundation Norway/GRID-Arenda, 2014), the

Democratic Republic of Congo (DRC) has the highest volume of illegally harvested timber: About 90% of all logging is illegal or informal (Lawson, 2014a). In the Republic of Congo, approximately 70% of all harvested and exported timber was found to be illegal or informal (Lawson, 2014b). Magrath et al. (2010) estimated that about 50% of the timber harvested in Cameroon is illegally harvested. Hansen and Treue (2008) indicated that in Ghana between 1996 and 2005, the amount of timber illegally harvested by around 100,000 chainsaw operators amounted to approximately 70% of the total. Most of the timber (about 84%) is destined for the domestic market or exported overland to neighboring countries (Marfo & Acheampong, 2011). In Cameroon, DRC, and Congo, the volume of illegally produced timber increased between 2000 and 2012, while it remained steady in Ghana (Hoare, 2015; Cerruti et al., 2020). While these figures are contested considering the lack of clear legal timber definitions, the illicit nature of the act, and the subjective estimation of volumes regarding illegally harvested wood, the implications of illegal logging across scales are unsustainable (Tacconi, 2007).

Scholars have highlighted the far-reaching implications of illegal logging (Hoare, 2015; Nellemann, 2012; Pokorny et al., 2016; Smith et al., 2003). Illegal logging may cause forest degradation (Gupta et al., 2013; Kissinger et al., 2012), which reduces forest biodiversity and leads to overharvesting and the extinction of endangered tree species (Elias, 2012; Nasi et al., 2012; Van Hensbergen, 2016). In terms of global climate change, Hoare (2015) calculated, based on round-wood equivalent, that more than 80 million cubic meters of timber illegally produced in just nine producer countries in 2013 released at least 190 million tons of carbon dioxide into the atmosphere.

In terms of poor governance, systemic corruption undermines institutions to enforce forest laws, reduces domestic tax efforts, and contributes to under-resourced governments in

forest-rich regions (Contreras-Hermosilla, 2002; Pokorny et al., 2016). For instance, many timber companies in Africa have colluded with government representatives to extract timber illegally and have evaded taxes by misrepresenting production figures in their reports to the government (Altman et al., 2012; Global Witness, 2002). Economically, governments lose estimated assets and revenues of more than US\$ 10–15 billion per annum due to illegal logging on public lands (Contreras-Hermosilla, 2002). Even though this figure is expected to be less because of recent targeted global interventions, a recent study by Humphreys et al. (2019) indicates that the current estimate is almost eight times the total official development assistance devoted to forests. This calls for urgent targeted international interventions to address illegal logging.

FLEGT VPA

The FLEGT Action Plan was adopted in 2003 to reduce illegal logging and the related trade (European Commission—EC, 2003a). It sets out seven measures³ that together "prevent the import of illegal timber into the EU, improve the supply of legal timber, and increase demand for timber from responsibly managed forests" (EU FLEGT Facility, 2019; http://www.euflegt.efi.int/es/flegt-action-plan). The seven measures embedded in the FLEGT Action Plan include (EC, 2003a): (a) technical and financial support for timber-producing countries; (b) trade in timber with VPA partner countries; (c) safeguards for financing and investment; (d) support for private sector initiatives; (e) use of existing legislative instruments to support the FLEGT Action Plan; and (f) action to address the problem of "conflict timber."

One of the assumptions of the Action Plan is that national development agendas reflect the three pillars of sustainable forest management, namely economic viability, social equity, and

³ While it is beyond the scope of this dissertation to cover the seven measures in the FLEGT Action, I focus on the first two measures, especially VPA as its central element in the fight against illegal logging and related trade.

environmental sustainability (Pfeil et al., 2007). As a result, the EU 'experiments' with Voluntary Partnership Agreements, in which the governments of timber-producing countries agree to implement a range of measures to tackle illegal logging and the related trade, foster forest sector growth and economic development, and improve "good forest governance" (Cashore & Nathan, forthcoming).

The EU legal framework for the voluntary scheme, which ensures that only legally harvested timber and timber products are imported into the EU, is the EU Timber Regulation (EUTR)⁵. A legally binding VPA is underpinned by a strong Timber Legality Assurance System (hereinafter TLAS) for implementing its requirements in a timber-producing country. The TLAS ensures that timber is legally sourced, produced, transported, and exported to the EU in accordance with national and EU regulations through a FLEGT licensing scheme. To issue a FLEGT license, a partner country must implement a TLAS as specified in the agreement (EC, 2020). Once operational, a TLAS must be "both robust and credible, as it includes effective supply chain controls and mechanisms for verifying compliance, and is subject to independent audits" (EC, 2020, Environment section). Together, these measures encourage better forest law enforcement and provide a credible system for verifying timber exported to the EU (Gupta et al., 2013).

The EU FLEGT Action Plan and its flagship VPA focuses on three key forest-rich regions and countries that are home to almost 60% of the world's forests and produce the

⁴ Good forest governance in this context "implies, among other aspects, respect for the rule of law in forest activities, transparent resource management, participatory rights in decision-making, equitable and secure land tenure, the control of corruption, and local levels of use and management" (NYDF, 2019; p. 11).

⁵ EUTR consists of supply side and demand side measures. On the supply side, the EU Regulation No. 2173/2005 endorsed a FLEGT licensing scheme for timber importation from countries entering into bilateral VPA with the EU (EC, 2008). On the demand side, the EU Timber Regulation no. 995/2010 imposes obligations on EU wood importers to exercise 'due diligence' in sourcing timber and timber products from suppliers, and to document information on suppliers and consumers (Gupta et al., 2013).

majority of timber that is traded internationally (Pfeil et al., 2007). These regions are Central Africa, tropical South America, and Southeast Asia. Currently (May 2020), only Indonesia is able to issue FLEGT licenses. Five other countries in Africa—Cameroon, Central African Republic (CAR), Congo, Ghana, and Liberia—are currently implementing VPAs, while VPAs have been agreed in Guyana, Honduras, and Vietnam but have not yet been signed or ratified (EU FLEGT Facility, 2020b). Six other countries—Côte d'Ivoire, Democratic Republic of the Congo, Gabon, Laos, Malaysia, and Thailand—are still in the negotiation phase (EU FLEGT Facility, 2020b).

The NYDF and UNSPF

In recent years, several other global-scale developments have been established to halt tropical forest loss, in particular the New York Declaration on Forests (NYDF) and the United Nations Strategic Plan for Forests (UNSPF) 2017–2030. In September 2014, the NYDF, a non-legally binding declaration, arose out of a political dialogue among governments, companies, civil society, and indigenous peoples' organizations (UN, 2014; 2018). Underlying this declaration is the shared understanding that halting tropical forest loss is essential to "keep temperature increases below 2 degrees Celsius above pre-industrial levels" (NYDF, 2019, p. 3). Around 200 endorsers adopted this ambitious declaration, which consists of 10 goals. By pledging to these 10 goals, the 200 endorsers agreed to work toward halving tropical forests globally by 2020 and stemming it by 2030 (NYDF, 2019). In addition, the NYDF calls for the ecological restoration of 150 million hectares of degraded landscapes and forestlands by 2020, and of 350 million hectares by 2030 (NYDF, 2018; 2019).

Similarly, the UNSPF—which was adopted by the UN General Assembly in 2017—provides "a global framework for actions at all levels to sustainably manage all types of forests

and trees outside forests and halt deforestation and forest degradation" (UNFF, 2017a, p. 1). The UNSPF also provides a framework for forest-related contributions to the implementation of the 2030 Agenda for Sustainable Development, the UN Forest Instrument, and other international forest-related commitments (UNFF, 2017a). At the core of the UNSPF is a set of six Global Forest Goals and 26 related targets to be achieved by 2030. The goals are intended to guide national forest strategies worldwide, and are also being taken up by other national and global organizations that are keen to assert control over tropical forest loss (UNFF, 2017a).

Both NYDF and UNSPF represent ambitious global forest goals for the international community, but much of their potential for sustainable forest management (SFM) depends on how these goals are linked to other international forest-related instruments to enhance international arrangements on forests. As stated in the 2018 FAO report, the key to unlocking the door to progress in some of these recent global-level policy developments is to explore the extent to which they are interlinked and understand "the golden threads that tie multiple goals and targets together" (FAO, 2018; p. iv).

Emerging Scholarship Gaps and the Need for Research

Reflecting on the governance issues discussed above, experience of FLEGT implementation suggests that it is crucial to explore coherence logics (Tegegne, 2016; Tegegne et al., 2018) and address governance gaps in forest-related policies in a manner that is consistent with good forest governance principles (Kanowski et al., 2011; NYDF, 2019). First, the literature generally points to the urgent need for coherence in global-scale policy developments, which is dependent upon "interlinkages" of policy objectives and instruments, facilitated by a common strategic agenda such as climate change (Tegegne, Cramm, Köhl et al., 2018; Scobie, 2015).

Scobie (2015) argues that dealing with complex socio-ecological systems at multiple scales will

therefore require a better understanding of policy coherence in order to ensure that climate governance proceeds along a sustainable trajectory. In the face of complicity in global forest governance, a lack of coherence analysis could lead to ineffective policy design and implementation, and consequently result in adverse governance impacts (Tegegne, Cramm, Köhl et al., 2018).

Policy coherence among international forest regimes has been the subject of many scholarly works in the last few decades (Humphreys, 1999; Glück et al., 2010; Mitchell, 2003). While there is growing research on policy coherence, these studies focused on either FLEGT and the Reducing Emissions from Deforestation and Forest Degradation (hereinafter REDD+) initiative at the national level (Broekhoven & Wit, 2014; Tegegene, 2016; Ochieng et al., 2013); however, the interlinkages among FLEGT, REDD+, and sustainable forest management (SFM) at the global level have often not been examined (Duguma et al., 2014; Tegegne, Cramm, & Brusselen, 2018). More importantly, the specific policy objectives and instruments of FLEGT, NYDF, and UNSPF have not been researched or analyzed, although scholars have looked into the importance of interlinkages among global forest-related policies in pursuance of Dutch international forest policy (van Dam, 2019) or the international forest regime complex (Fernández-Blanco, Burns, & Giessen, 2019). Moreover, these scholarly works did not explicitly examine the implications for managing the interlinkages among FLEGT, NYYDF, and UNSPF at the national level where regime implementation occurs.

As Tegegne, Cramm, and Brusselen (2018) point out, the outcomes of global-level forest policy give strategic management direction and momentum to the design and implementation of regional and national forest strategies. NYDF and UNSPF are considered prominent global forest frameworks to halt natural forest loss by 2030. The goals set out in the NYDF and UNSPF all

speak to shared international commitments to a number of critical policy outcomes around reducing deforestation, increasing forest restoration, international agreements and finance, and good forest governance (NYDF, 2018; UNFF, 2017a). Understanding whether, how, and what strategic agendas are covered or jointly addressed in FLEGT, NYDF, and UNSPF, is important from a forest policy coherence learning perspective. In this dissertation, I examine interlinkages among FLEGT, NYDF, and UNSPF at two critical policy levels: (a) policy objectives, namely specific targets or goals in the policy, and (b) policy instruments for implementation, that is, tools and strategies for translating policy objectives into operational programs in the context of international forest regimes. This research is highly important, as the scale and nature of the problems require a coherent international response (Hoare, 2015).

Most developing countries are at various stages of these international forest regimes. Scholars, however, have argued that the "institutional capacity" for implementing these recent regimes should be subject to critical forest governance assessment by the scientific community, because practical knowledge of how these good forest governance principles are best translated to improve the outcomes of forest conservation and management remains limited (Adams et al., 2020; Cashore, 2009; Kanowski et al., 2011). This assessment is particularly important, because attempts to deal with weak forest governance will not be successful unless the institutions and processes influencing the management of forests are also improved to bring about transformation when and where necessary (Ameyaw et al., 2016; Minang et al., 2017). In the FLEGT context, the current knowledge gap concerns the capacity assessment of those in charge of implementing and enforcing the VPA at a country level, especially in African VPA countries (Adams et al., 2016; Adams et al., 2020; European Forest Institute—EFI, 2013). More importantly, how decision makers garner a diverse range of perspectives in order to address practical matters of

concern or define solutions within the forest sector has received limited attention. Against this common background, there is a need to fill these knowledge gaps concerning the policy coherence and capacity of the FLEGT VPA in achieving the larger goal of legal and sustainably managed forests at the global level.

Conceptual and Methodological Considerations

This brief conceptual and methodological exploration is important to understand the conceptual underpinning of this dissertation and maintain an implicit and more concise narrative that is interesting and does not contain many redundancies. Using a multi-scalar forest governance approach, I highlight the ways in which policy interventions are interlinked to support more coherent policymaking at the international level and more effective policy implementation at the regional and national levels, based on existing applied policy frameworks. In brief, I present this set of frameworks for institutional analysis (policy coherence, institutional capacity, and good governance) that provides the groundwork for my research.

My frameworks are two strands of conceptual consideration: policy coherence—that is, interlinkages between different global-level forest policies—and institutional capacity for good forest governance, namely the overall ability to apply the principles of good governance. First, drawing on policy design approach allowed me to deconstruct FLEGT, NYDF, and UNSPF outputs into a set of policy attributes and to assess the interlinkages between different global-level forest policies of the said regimes (Glück et al., 2010). The policy attributes of international forest regimes include (Glück et al., 2010, p. 40):

- 1. policy objectives (specific targets or goals or strategic agendas in the policy);
- policy instruments (tools and strategies for implementation or to achieve the desired policy goals or strategic agendas);

- 3. "the preferences and behaviors of internal target groups"—state and non-state actors responsible for successfully implementing and adjusting the policy instruments;
- 4. "the preferences and behaviors of external target groups"—key actors whose behavior the policy instruments intend to influence directly or indirectly (e.g. consumers of forest products in the global North); and
- 5. policy rationales—the primary reasons for the choice of policy goals and policy tools, including the policy assumptions that underline the policy goals.

By reviewing the policy attributes of the core components of FLEGT, NYDF, and UNSPF, it is possible for me "to determine the extent to which the policy objectives of each component are not only internally coherent; the policy tools chosen to achieve the overarching policy goals are consistent with each other; and the policy instruments themselves conform to the general preferences of the international target groups" (Glück et al., 2010, p. 40). For analytical traction and for the purposes of this dissertation, I focused primarily on the first two policy attributes of international forest regimes, namely policy objectives and policy instruments.

A key factor influencing the specific ways in which policy instruments might be enforced is the extent to which all governance institutions have the capacity to implement their substantive policies (Cashore, 2009). Here, my attention is focused on institutional capacity as a means for developing substantive policies and enhancing such policy calibrations within the FLEGT context, particularly the implementation of good forest governance principles.

To develop an analytical framework for assessing institutional capacity, I used the good forest governance framework of the Program on Forests/United Nations Food and Agriculture Organization (PROFOR/FAO, 2011). This framework articulates six key principles of good governance: (a) accountability, (b) effectiveness, (c) efficiency, (d) fairness and equity, (e)

participation, and (f) transparency. These six principles interlace with three core pillars of forest governance:

- 1. Policy, legal, institutional, and regulatory frameworks;
- 2. Planning and decision-making processes; and
- 3. Implementation, enforcement, and compliance.

Accordingly, I identified two distinct, but interrelated, dimensions of institutional capacity to assess good forest governance: potential capacity—which relates to having impressive regulations (here, good forest governance requirements in VPAs)—and realized capacity, which refers to how principles of good forest governance in said VPAs are translated into concrete operational programs, including the development of TLAS. When TLAS is taken in conjunction with broader good forest governance requirements (e.g., participation and transparency) as noted in the VPAs, scholars argue that implementing TLAS to address non-compliance along the global supply chain is absolutely instrumental in promoting good forest governance (Adams et al., 2020; Cahore & Nathan, forthcoming).

Overall, I used the concept of multi-scale governance perspective in the FLEGT context as being a means for strengthening forest policy coherence and improving capacities for effective collective action to address forest governance problems (FAO, 2020). This governance approach is problem-driven, context-specific, and stakeholder-centered as it seeks to clarify the nature of key challenges governing forests, identify the fundamental issues, and engage all relevant stakeholders in defining solutions (FAO, 2020). These frameworks provided the basis for a systematic analysis of FLEGT efficacy to tackle illegal logging at three spatial governance levels: (a) the global level, (b) a continent level (i.e., sub-Saharan Africa), and (c) a country-specific level (i.e., Ghana).

I unpack policy coherence as a critical strategy for strengthening forest policy coherence at the global level. At the continental level (sub-Saharan Africa), my "institutional capacity for advancing good governance" framework seeks to better understand how institutional capacity affects the implementation of the VPA process. At a country level (Ghana), my expanded "good governance" lens looks beyond purely capacity issues, to highlight how key stakeholders and state authorities interact to influence VPA policy outcomes. Table 1.1 below summarizes the critical focus areas of each framework.

Table 1.1Categorizing Institutional Analysis Theories and their Key Focus Areas

Framework	Key focus area	Unit of analysis
Policy coherence	Interlinkages between different policies at the international level	Policy objective Policy instrument
Institutional capacity for good forest governance	The overall ability (i.e., potential and realized capacities) to execute the principles of good governance	Accountability Effectiveness Efficiency Fairness/Equity Participation Transparency

Methodologically, I employed an exploratory case study design (Simons, 2009; Yin, 2003) to examine FLEGT efficacy from a multi-scalar governance perspective. Simons (2009) defines case study research as "an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program or system in a real-life context" (p. 21). This case study research revealed "multiple perspectives" and investigated "contested viewpoints" that demonstrate the influence of and interactions between stakeholders in [VPA] policy evaluation (Simons, 2009, p. 23). Through a case study analysis of FLEGT efficacy at the three levels of governance (global, continental, and local), I sought to

understand the FLEGT phenomenon and good forest practices aimed at tackling illegal logging through the lens of policy coherence and institutional capacity. Below, I outline how such case study research was carried out, building on the conceptual discussion above.

I began the FLEGT efficacy case study with a qualitative exploration (Creswell & Creswell, 2018), based on a broader analysis of literature and both primary and secondary materials related to FLEGT, NYDF, and UNSPF to assess their interlinkages within global forest governance realities (research question 1). Here, I argue that a case study of recent global-level policy developments and the extent to which they have contributed to important strategic agendas in terms of SFM, forms a focus of analysis. To understand the institutional capacity of the VPA process, I used content analysis of VPA-related documents, meta-analysis of cases in sub-Saharan Africa, and interaction with VPA focal persons in the assessment. In the current VPA process, cases in five sub-Saharan African countries (Cameroon, CAR, Congo, Ghana, and Liberia) were compared in order reveal the potential of VPA processes for advancing good governance and implementing TLAS/WTS, as well as current challenges limiting realization capacities (research question 2). The case study countries were selected in order to compare, at the implementation phase, across African countries—a regional block that has been the target of many international interventions in connection with deforestation and forest degradation, and that is linked to climate change and biodiversity loss (Bernstein & Cashore, 2012). In these countries, good forest governance practices have been advocated and promoted as potential legal and sustainable forestry solutions to illegal logging and related issues.

Consequently, I used Q methodology to assess stakeholder perspectives and understand good forest governance as applied to the VPA in Ghana (research question 3). A Q study is

closely associated with human subjectivity, which is self-referent (Brown, 1980). Designing and conducting a Q study is an involved process that comprises five steps:

- 1. Developing a concourse of statements (i.e., principles of good forest governance);
- 2. Selecting theoretically and pragmatically appropriate Q participants (in this case, multiple stakeholders in Ghana's forest sector, namely government forestry agencies, local communities, FLEGT Facilitator/EU delegation in Ghana, non-governmental organizations and civil society groups, the private timber industry, and research and educational institutions, but no local communities);
- 3. Administering the Q sort;
- 4. Conducting post-Q sort semi-structured interviews; and
- 5. Analyzing the Q sort and interpreting the factor groups to identify social perspectives and areas of agreement and disagreement.

Carefully applying separate exploratory qualitative methods for research questions 1 and 2, as well as a mixed-methods approach to research question 3, allowed a more robust and synergistic utilization of rigorous procedures in collecting data than single qualitative and quantitative research design, data collection, and analysis. Q methodology fits into complex mixed-methods designs (Creswell & Creswell, 2018). By "complex," Creswell and Creswell (2018) meant that "the designs involve more steps and procedures than are embodied in the three core designs [convergent, explanatory sequential, and exploratory sequential, which are the foundation of a good mixed-methods research]" (p. 226). In a Q study context, the exploratory sequential is added to Q methodology. It involves three-phase procedures. I first collected qualitative data on principles of good forest governance and analyzed them using content analysis. I then designed a quantitative feature (i.e., a forced distribution chart that reflects

stakeholder's subjective viewpoints). I finally tested the quantitative feature by conducting a factor analysis using R computational software with an R Q sort package (version 3.5.3) and interpreted the qualitative meaning of the factor structure (R Core Team, 2018; Stevenson, 2015).

At a general level, I employed Q methodology because of its ability to effectively combine qualitative and quantitative dimensions into a robust mixed-methods design (McKeown & Thomas, 2013). At a practical level, it fits into a good governance conceptual framework and provides a complex approach that appeals to those at the forefront of forest governance research (Nijnik et al., 2018). At a procedure level, it was a useful strategy to have a complete understanding of the forest governance research problems and research questions within the FLEGT context.

Ethical Considerations

Before entering the field for my data collection, I received institutional review board (IRB) approval from Antioch University New England. Following this approval, I fully informed the research participants what my research was about, why it was important to conduct good forest governance research, which sponsors were involved, how my research would be published, and the potential implications for the respondents (Somuah, 2018). Throughout the research process, I ensured trustworthiness by building relationships with my research participants.

As recommended by Rossman and Rallis (2017), I approached the relevant organizational heads acting as 'gatekeepers' and spent time developing interpersonal trust, collaborations, and relationships with them. In this context, the term 'gatekeepers' refers to relevant organizational and individual stakeholders who participate in and influence VPA decisions and implement the

VPA operational programs. I maintained this ethical standard with the help of organizational gatekeepers of state institutions as well as departmental heads, who usually knew the agencies' codes of conduct. I also respected the institutional integrity of all organizations I contacted by ensuring due diligence in sourcing and by using verifiable research information and materials during my research process.

Additionally, I ensured the confidentiality of the participants and their information by using password-protected files to secure data and audio-recorded interviews. As an essential part of my study, I used no attributions when writing this dissertation. However, I will draw on the assembled data for a period of five years to efficiently utilize the resources at my disposal, for example, aimed at cross-referencing materials. After five years have elapsed, I will destroy the hard and the soft copies of data.

A feasible research study must be politically acceptable and sensitive, since the process of collecting data inevitably has implications for policy processes. To practice conscientiousness over the political implications of what information and findings the research revealed, I obtained informed consent for the interviews and emphasized the issue of confidential policy documents. In line with this, I disclosed my research intent to Ghana's Ministry of Lands and Natural Resources, which is the executive arm with oversight responsibility for forestry sector development; I therefore paid attention to their interests and perspectives. In addition to the strategies described above, I sought feedback from relevant organizations in an interactive and continuous process, and shared my reflections with them after every Q sort exercise. As recommended by Bardach and Patashnik (2015), I opened up dialogue and infused it with reason and insight about the social relevance of my research. I further employed subtle styles of

leverage, such as asking relevant and explicit questions to sustain open and meaningful dialogues and to examine critical issues I raised during the interviews.

The issue of power dynamics as a control of knowledge production in research interactions is inevitable, especially in localized contexts (Van der Riet & Boettiger, 2009). Since the categories of stakeholders in the Ghanaian forestry sector are not homogenous, a range of power differentials may exist among them. Power dynamics in heterogeneous groups, like the stakeholders in the Ghana forest sector, are likely to favor the more powerful but less important stakeholders. I redressed this possible power imbalance by selecting less powerful stakeholders as well as powerful stakeholders to ensure that the views of the full range of stakeholders in the forest sector of Ghana were incorporated in the Q study.

Positioning Myself in this Dissertation

Ghana, like many developing countries, is faced with sustainable development challenges. Of particular interest to me are those that relate to environmental governance, such as forests and climate change, forest management and forest policy development, and the extent to which key stakeholders are engaged in forest policy development. Over the years, Ghana's forests have experienced setbacks such as deforestation, illegal logging, illegal mining, forest fires, and wildlife poaching, which constitute a major development challenge to the forestry sector in Ghana. If they are not checked they might contribute to serious long-term environmental consequences, such as climate change impacts and loss of biodiversity.

Consequently, if left unresolved, such problems could militate against the attainment of SDG 15: Life on Land ("Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt

biodiversity loss", and other international ambitions and commitments to conserve forests as stipulated in the Conference of Parties, COP 21 (UN, undated, Sustainable Development Goals section).

These environmental problems in Ghana are much of our own making. It is the value we place on our forests as a country, and also the relationship between us all and our endowed natural resources, that is at the core of these issues. Based on my personal observations, and supported by the literature (Hansen et al., 2018; Rutt et al., 2018), the problems in the forest sector of Ghana are related to how we quickly adopt global policies and endlessly discuss them at the national level, but are not able to pursue or implement them effectively to improve forest management outcomes. Over the years, this has profoundly undermined national efforts to address forest management challenges. In my view, it is this policy implementation at all levels that has to be a full part of any natural resources governance solution to the problems that Ghana currently faces.

The above 'wicked' problems—complex interconnected problems that exhibit unique characteristics in a real-life context (Rittel & Webber, 1973)—have had a profound influence on my academic and professional development over the last decade. They became the guiding principles of my choice of academic programs. Having majored in natural resources management at the University for Development Studies in Ghana, I concentrated on environmental resources management for my Master's program at Kwame Nkrumah University of Science and Technology (KNUST) in Ghana. To contribute toward solving these wicked problems, during my Master's at KNUST, I examined more closely forest governance issues by looking at stakeholder participation in forest management in Ghana at four levels (i.e., planning, implementation, monitoring, and benefit-sharing) and the factors influencing their participation.

This study provided recommendations to support decision-making in the policy and practice of Ghana's forest sector.

Along with my past training as a forest manager and a prosecutor of forest and wildlife crimes at the Forestry Commission of Ghana, I worked on forest law enforcement to address forest management challenges in Ghana. Working as a forestry practitioner at the grassroots level from 2010 to 2016 gave me the exposure that allowed me to reflect more deeply about sustainable forest management strategies that can be explored to strengthen the institutions that deal with wicked problems in the forest sector. This professional drive to improve the achievements of sustainable forestry goals, motivated me to undertake a technical exchange program on forest and wildlife crimes, including the Climate Change and Natural Resources Management Program in mid-2016, with the United States Department of Agriculture Forest Service International Programs (USFS IP) in Washington, D.C., and University of California, Davis. As a US Government Exchange Scholar of Forest and Wildlife Crimes with the USFS IP, we exchanged ideas that can be applied in our respective countries to address pressing environmental issues. Previous practice-based programs that have also shaped my research interest in forest governance include the International Training on Participatory Rural Development at the National Institute of Rural Development and Panchayariraj, Hyerabad, India, Climate Change Governance and Natural Resources Management in 2015, at Wageningen University, Centre for Development Innovation, the Netherlands, and working with Moosewood Ecological Services in the northeastern part of the United States.

In pursuing my personal—societal relevancy by combining scholarship with real-world experience at Antioch University New England (AUNE) in the United States, I demonstrate my commitment to sustainable forests not only through my work experience as a forest manager and

policy practitioner, but also through my current research in forest policy and governance at AUNE. In essence, this dissertation is a result of my commitment to environmental and social justice, the principles of good forest governance, and social innovations.

Dissertation Outline

This dissertation is structured and formatted as multiple chapters, each of which has been submitted or published as a stand-alone peer-reviewed journal article. The dissertation has three empirical chapters, and each has its own abstract, introduction, theoretical or conceptual approach, methods, results, discussion, and conclusion sections. I provide a list of all references for the five individual chapters in a separate section at the end of this dissertation, where I also provide six appendices.

Chapter 2 presents the first empirical study, "FLEGT, NYDF, and UNSPF strategic agendas in a comparative perspective: Toward managing interlinkages." The chapter discusses the interlinkages among the three prominent global-scale policy developments that collectively make up the present approach to SFM within the international forestry regimes. The aim of the research presented in this chapter was to answer the first research question: How do the NYDF and UNSPF interlink with the FLEGT Action Plan at two critical policy levels: policy objective and policy instrument? The research drew on a conceptual framework of policy coherence to develop an analytical framework, and also used a content analysis of forest-related policy documents and interviews to explore interlinkages among FLEGT, NYDF, and UNSPF 2017-2030.

Chapter 3 presents the second empirical study: "A comparative analysis of the institutional capacity of FLEGT VPA in Cameroon, the Central African Republic, Ghana, Liberia, and the Republic of Congo." The related research engaged the second research question:

"Focusing on priorities set out in the VPAs, to what are the potential and realized capacities of VPA processes for advancing principles of good governance and implementation of TLAS and the WTS in Cameroon, CAR, Congo, Ghana, and Liberia?" Using the theoretically derived framework from the extant literature on institutional capacity for good governance, the research assessed the potential and realized capacities of VPA processes for advancing principles of good governance and implementation of TLAS/WTS in Cameroon, CAR, Congo, Ghana, and Liberia. It reviewed the progress made toward the achievement of the FLEGT licensing as well as the challenges that hinder the implementation of VPAs, based on VPA literature, a meta-analysis of cases in sub-Saharan Africa, and interaction with focal points.

Chapter 4 presents the third empirical study: "Good Governance Practices in Ghana's FLEGT Voluntary Partnership Agreements Process: An Application of Q Methodology." The research engaged the third research question: "What are the different stakeholders' perspectives on good governance as applied to VPA in Ghana?" To answer this question, the research expanded on the good governance framework in Chapter 3 and employed Q methodology to benchmark the principles of good governance as applied to VPA in Ghana from different stakeholder perspectives.

Chapter 5 presents the comparative synthesis and conclusions arising from the major findings presented in the three empirical chapters. The chapter is concluded with an outline of the theoretical, methodological, and policy implications of the present research, and recommendations for policymakers and future research. It also provides a general reference list and appendices.

This dissertation is a summary of the following original papers:

- I. Adams, M.A., Kayira, J., Gruber, J. S., Tegegne, T. Y., Attah, A., & Idemudia,
 U., Tuokuu, F.X.D. (forthcoming). FLEGT, NYDF, and UNSPF strategic agendas
 in a comparative perspective: Toward managing interlinkages. *International Environmental Agreements*. Under review.
- II. Adams, M.A., Kayira, J., Tegegne, Y. T., & Gruber, J. S. (2020). A comparative analysis of the institutional capacity of FLEGT VPA in Cameroon, the Central African Republic, Ghana, Liberia, and the Republic of the Congo. *Forest Policy and Economics*, 112, 102108. https://doi.org/10.1016/j.forpol.2020.102108.
- III. Adams, M.A., Kayira, J., Gruber, J. S., Idemudia, U., Tegegne, T. Y., Attah, A., Tuokuu, F.X.D., & Ansong, M. (forthcoming). Good Governance Practices in Ghana's Voluntary Partnership Agreements Process: An Application of Q-Methodology. *Journal of Environmental Policy and Planning*. Resubmitted.

The author's contribution: Marshall Alhassan Adams is responsible for the original crafting of the three articles. My co-authors contributed by commenting upon the articles and suggesting how to apply their comments in the respective manuscripts. They also assisted in revising certain sections of my articles prior to submitting them to the targeted journals.

Chapter 2: FLEGT, NYDF, and UNSPF strategic agendas in a comparative perspective: Toward managing interlinkages

Abstract

The quest to effectively govern forest resources has led to a proliferation of international forest regimes, agreements, and conventions. This in itself calls for a robust understanding of how interlinkages can be managed or of new ways of doing so. Yet the focus of many empirical studies has been on interlinkages that are not instrumental to the global context, especially how the core attributes of regimes pursue different strategic agendas. Using content analysis, the present research filled this research gap by undertaking a practical assessment of the interlinkages among European Union (EU) Forest Law Enforcement, Governance, and Trade (FLEGT), the New York Declaration on Forests (NYDF), and the United Nations Strategic Plan for Forests 2017–2030 (UNSPF) at the global level, given their shared competences. The results show that FLEGT, NYDF, and UNSPF share similar policy instruments, such as information sharing, strategic plans, financial resources, and technical capacity support. This finding could contribute to achieving the common strategic agendas on good forest governance, finance for forests, forest loss, and climate change in FLEGT, NYDF, and UNSPF simultaneously, through the prioritization of policy instruments, particularly information sharing. Information sharing, thus, becomes a key factor for continuous inter-institutional learning, as global policy processes reveal incoherencies within the current global forest governance architecture. This paper contributes to forest policy coherence learning at the level of theory and analytical understanding. It also shows how to both effectively manage the potential interlinkages at the global level and strengthen the long-term effectiveness of international forest regimes at the national level.

Keywords, FLEGT, NYDF, UNSPF, Interlinkages, Strategic agenda, International forest regimes

Introduction

Global forest governance continues to undergo a remarkable policy change, that is, alterations in a wide range of legally binding instruments and non-legally binding instruments on all types of forests (Humphreys, 1999). In 2003, the European Union (EU) launched the Forest Law Enforcement, Governance, and Trade (FLEGT) Action Plan to tackle illegal logging and the related trade in many tropical forest countries within the framework of the G8 Action Program on Forests (European Commission—EC, 2003a). A Voluntary Partnership Agreement (VPA)⁶ is a central element of the FLEGT Action Plan in the fight against illegal logging and the associated trade (EC, 2007). VPAs are intended to guarantee that timber and timber products imported into the EU from partner countries (i.e., countries that have entered into partnership agreements with the EU) come from legal sources, thus help exporting countries tackle illegal logging by improving regulations and governance (EC, 2007).

Similarly, as awareness grew of the contribution of illegal logging and deforestation to climate change, a network of actors working under the umbrella of the United Nations

Framework Convention on Climate Change (UNFCCC) proposed the Reducing Emissions from Deforestation and Forest Degradation (REDD+) mechanism, and to include "the role of conservation, the sustainable management of forests, and the enhancement of forest carbon stocks in developing countries" in a post-2012 climate change agreement, upon the expiration of the Kyoto Protocol (UNFCCC, 2007, paragraph 1b-iii). REDD+ is based on the concept of compensating developing countries for their efforts to reduce emissions from deforestation and forest degradation or to create new carbon sinks (forests) at the landscape level (EFI, 2013).

Since 2012, a number of new policy initiatives aimed at protecting and restoring forests as a

⁶ A VPA is a bilateral trade agreement between the EU and a timber-exporting country outside the EU.

strategy for climate change mitigation have continued to emerge. Such related policy events at the global level include the New York Declaration on Forests and the adoption of the UNSPF in 2017. As such, there is now a need for a coherent policy approach to the management and conservation of all types of forests, and to the promotion of partnerships and stakeholder engagement in forests (Food and Agriculture Organization—FAO, 2018). This concern has largely been emphasized in the UNSPF and the NYDF, where coherence, coordination, and cooperation to promote sustainable forest management (SFM; see conceptual framework section for the definition) and reverse the loss of forest cover worldwide, is highlighted as being a significant goal and target (UN Forum on Forests, 2017).

Since FLEGT was established before the NYDF and the UNSPF were agreed in 2014 and 2017, respectively, special attention is needed when explicitly linking their substantive policy objectives and instruments. Although all the international forest policies mentioned above have an explicit goal of reducing global forest loss, the fundamental question is to what extent are the NYDF and the UNSPF complementary or in competition with the global efforts of the FLEGT Action Plan to reduce forest loss. Essentially, to put "policy coherence" to further use in support of international commitments to halt forest loss by 2030, we need to thoroughly understand the interlinkages between the different global forest-related policies. Such an understanding is imperative for "enabling policymakers to strike the right balance in actions, investments, partnerships directed toward ecological conservation, and ultimately, to find pathways to sustainable development" (FAO, 2018, p. x). However, the approach to enable policymakers to improve efficiency, or at least avoid any potential duplication of resources (e.g., funds) that

would undermine the effectiveness of international forest regimes,⁷ is still not well understood (Gupta et al., 2016; Tegegne, Cramm & Brusselen, 2018). Rather than allowing the global forest initiatives to develop in isolation from each other without interlinkages, it is worthwhile to explore ways to strengthen their effectiveness through better coordination (EFI, 2013). This underscores the need to undertake a practical assessment that examines policy interlinkages at two critical policy levels: (a) policy objectives; and (b) policy instruments for effective policy implementation that can strengthen on-the-ground forest policy coherence and ensure positive outcomes.

Without carefully nurturing the potential interlinkages among the different policy objectives and instruments, policy incoherencies are likely to persist and undermine effective forest management. As a result, a number of scholars have made efforts to improve the conceptual and analytical approach to assessing interlinkages (Dohlman, 2014; Howlett & Rayner, 2013; Kalaba et al., 2014; Koch, 2018; Tegegne, Cramm & Brusselen, 2018). This scholarship has spurred a number of empirical papers on interlinkages, particularly in the field of the environment and forests. In general, scholars have explored the EU Forest Strategy and its linkages to EU forest-related policies (Aggestam & Pülzl, 2018) and assessed international forest regimes (Fernández-Blanco et al., 2019; Glück et al., 2010; McDermott et al., 2007; Mitchell, 2003; Tarasofsky, 1999; van Dam, 2019) and interlinkages between REDD+ and the Sustainable Development Goals (Bastos Lima et al., 2017).

The academic literature on interlinkages between FLEGT and REDD+ has been dominated by policy studies at a country level (Ochieng et al., 2013; Tegegne et al., 2014;

⁷ A regime in this paper context is a single international forestry agreement or convention or declaration or international agenda on forests. Therefore, each of the different international forest regimes—FLEGT, NYDF and UNSPF 2017-2030 can be considered as separate and independent forest regime.

Tegegne et al., 2017). However, interlinkages studies have paid scant attention to recent global-level policies, for example, interlinkages among SFM, FLEGT, and REDD+ (Tegegne, Cramm, & Brusselen, 2018). To tackle the current global forest policy issues, more in-depth knowledge about the implications of interlinkages is needed to strengthen forest policy coherence from a global-scale perspective (Duguma et al., 2014; Tegegne, Cramm, & Brusselen, 2018). When attention is not paid to the interlinkages between global-level policy developments, it is often assumed that a particular policy solution is suitable for policy implementation and conflicts are likely to result. Importantly, interlinkages at the global level are particularly critical to achieving practicable and actionable outcomes consistent with global-scale sustainability issues, such as climate change (Antwi-Agyei et al., 2017). Therefore, the present research set out to:

- 1. Examine the interlinkages among FLEGT, NYDF, and UNSPF at two critical levels, namely policy objective and policy instrument; and
- 2. Consider the policy implications of managing the potential interlinkages in a mutually reinforcing manner that best promotes the strategic agendas of SFM.

By addressing these objectives, the research filled a major gap in the literature. This is because the analysis of FLEGT, NYDF, and UNSPF appears particularly important in the light of the international forest community's quest to achieve the global goals and targets of reducing forest loss by 2030.

The remainder of this paper is structured as follows. Section 2 provides the context for the theoretical foundation and analytical framework underlying the present research. Section 3 introduces the methodological approach. Section 4 presents the findings, while section 5 discusses the interlinkages and policy implications. Section 6 draws conclusions and makes recommendations.

Theoretical Foundation for Developing an Analytical Framework

In recent years, the definition and characteristics of policy coherence have inspired scholarly works in the context of global environmental governance. For example, some scholars have theorized that "policy coherence" means consistency between different policies (Hertog & Stroß, 2011; Matthews, 2012). Other scholars disagree that policy coherence and policy consistency are identical policy characteristics (Howlett & Rayner, 2007; Mickwitz et al., 2009). Despite the increasing amount of policy coherence research, the concept remains vaguely defined, given that it is often used interchangeably with "policy consistency," "policy complementarity," and "policy coordination" (Cejudo & Michel, 2017; Howlett & Rayner, 2013). Accordingly, some scholars use the term "policy coherence" to mean promoting synergies (Missiroli, 2001), while the term "policy consistency" is interpreted as the absence of contradiction (Gauttier, 2004). A key insight from this growing literature is the lack of a shared understanding of and clarity with respect to the conceptualization of policy coherence. This makes it challenging to operationalize policy coherence in international regime assessment.

Considering that it is difficult to clearly define policy coherence, it is analytically important to adopt a definition for the strategic analysis of the interlinkages within and across sectorial policies as well as across forest governance scales (Organization of Economic Cooperation and Development—OECD, 2018). Therefore, I adopted the term interlinkages, which denotes logical consistency among overlapping or related international forest regimes, based on their mere existence (Tegegne, Cramm, & Brusselen, 2018). Overlapping in this study means "when the functional scope of one regime protrudes into the functional scope of others" (Glück et al., 2010, p. 13). Overall, policy coherence works when policymakers provide a consistent set of policy objectives and policy instruments to ensure interlinkages among

overlapping global-level policies that allow for clear responsibilities where their implementations occur.

Scholars in the field of international environmental regimes have developed a number of frameworks and typologies that facilitate the analysis of interlinkages between international forest regimes (Biermann et al., 2009; Gehring & Oberthür, 2009; OECD, 2018; Picciotto et al., 2004; Young, 1994; Zelli & van Asselt, 2013). Drawing on a similar typology of policy coherence used in examining interlinkages among regimes (Tegegne, Cramm, & Brusselen, 2018), it is essential to identify a set of policy design criteria with which to evaluate interlinkages (Antwi-Agyei et al., 2017; Glück et al., 2010). To that end, policy objectives (specific targets or goals or strategic agendas in the policy) and policy instruments (tools and strategies for implementation or to achieve the desired policy goals or strategic agendas) indicated what to look for, with particular attention paid to the interlinkages among FLEGT, NYDF, and UNSPF. This evaluation approach fit the focus of this research on the targeted interventions at the global level, rather than policy implementation at the landscape level (Tegegne, Cramm, & Brusselen, 2018).

In this research context and in my analytical framework (see Table 2.1), policy objectives interlink when they are consistent without major contradictions. They are, however, not interlinked if there are contradictions during the policymaking processes. Consistency of policy objectives necessitates contradiction-free objectives, creating mutual reinforcement of policy instruments and ensuring that interlinkages among regimes can be achieved (Kern & Howlett, 2009). These policy objectives and instruments may be proactively pursued depending on specific cases of global strategic agendas. Overall, policy instrument interlinkage is a step toward a shared overarching strategic agenda for promoting SFM, which takes place when the

interlinkage of two or more policies may make their policy instruments more effective or ineffective (Kern & Howlett, 2009).

SFM forms an important agenda of international forest regimes because it has been adopted as the overreaching goal for global forest management (Maguire, 2013). Here, SFM is defined as "[a] dynamic and evolving concept, [which] aims to maintain and enhance the economic, social, and environmental values of all types of forests, for the benefit of present and future generations" (UNFF, 2007, p. 3). I adopted the initial strategic agendas developed by van Dam (2019) for 17 international policy developments that directly or indirectly affect sustainable forest management and conservation. In this context, an "agenda" is defined as specific international policy developments and processes related to a major topical issue or policy objective/goal that is addressed by a broad network of transnational actors and agencies (van Dam, 2019). I focused in depth on six of the 17 strategic agendas presented by van Dam (2019), and reformulated the six strategic agendas to the context of the research. The six strategic agendas that are seen as the most crucial global forest issues—namely forest loss, climate change mitigation and adaptation, forest biodiversity, finance for forests, forest governance, and forest technology transfer—represent the common strategic agendas in FLEGT, NDYF, and UNSPF. This selection is neither exhaustive nor definitive. Appendix A presents the detailed definitions of the strategic agenda and the topics covered. To ensure analytical brevity, I omitted the following strategic agendas: soil, water, energy access, bio-economy, bioenergy, food security and consumption, sustainable agriculture, responsible infrastructure and mining, health, livelihood improvements, risk and disaster management, and markets and trade.

Table 2.1

An Analytical Framework for Assessing Interlinkages

Approach	Policy Level	Issue	Evaluation criteria
Policy coherence: interlinkages	Policy objective/strategic agenda	Are there any shared policy objectives/ strategic agendas among FLEGT, NYDF, and UNSPF?	If so, are there strong interlinkages and potential contributions to the strategic agendas for promoting SFM?
	Policy instruments	What contribution can FLEGT, NYDF, and UNSPF make to the achievement of a given strategic agenda for promoting SFM?	FLEGT, NYDF, and UNSPF policy instruments may make direct or indirect contributions, and could be enabling conditions for achieving the strategic agendas.

Source: Author

Methodological Approach

To limit my analytical bias, I used a two-step evaluation process: (a) identify policy documents for scoping and inventorying, and (b) screen and analyze interlinkages in the FLEGT, NYDF, and UNSPF regimes.

Identifying Policy Documents for Scoping and Inventorying

Given the global nature of the scope of the evaluation, the sources chosen also focus on the targeted global forest-related policies or strategies. This research built on existing information on legally and non-legally binding instruments that define FLEGT, NYDF, and UNSPF. An extensive literature review was conducted to identify policy documents relevant to the general architecture of FLEGT, NYDF, and UNSPF (see Table 2.2). While this was not a systematic review, it included reports, strategic policy documents, and other documentation relevant to the said regimes.

The selection of the data sources was based on two criteria—principally a policy document's applicability to the abovementioned three regimes. First, information with a direct link and immediate relevance to specific policy issues or policy domains in FLEGT, NYDF, or UNSPF was considered. Second, information with specific relevance for the FLEGT Action Plan was taken into consideration. Although the FLEGT Action Plan has seven broad measures (EC,

2003a), the research covered only two priority measures—namely support to timber-producing countries and trade in timber—as the basis for identifying contributions to answering the two research questions.

Overall, I cross-referenced these policy documents with past work done on the analysis of the abovementioned regimes (e.g., van Dam, 2019) focusing on a review of 17 international forest policies. The overview of international forest policies by van Dam (2019) was based on data collected from published literature and the websites of international institutions, as well as in-depth interviews with key experts in the period May–July 2018 and with outcomes from the "Strategic Agenda promoting sustainable forest management workshop in September 2018" (van Dam, 2019, p. 12). Based on the literature reviews, interviews, and the workshop, van Dam (2019) highlighted the strategic agendas where the Dutch government is strongly promoting the conservation and sustainable management of forests.

The overall aim of the present research was to conduct a comparative in-depth analysis of FLEGT, NYDF, and UNSPF strategic agendas. Each of the regimes included more than one referenced policy document (see Table 2.2). The identified key policy documents relevant to FLEGT, NYDF, and UNSPF are presented in Table 2.2. By reviewing the policy objectives and policy instruments of the regimes, it was possible to determine the extent to which their strategic agendas are interlinked and how the policy tools chosen to implement the agendas overlap each other.

Table 2.2

Overview of Key Policy Documents Reviewed

Document	Prepared by	Publication Year	Source of Policy Document
FLEGT-related policy documents			
Forest Law Enforcement Governance and Trade, proposal for an Action Plan	European Commission	2003	EC 2003a

Council conclusions on Forest Law Enforcement, Governance, and Trade (FLEGT)

Council conclusions on Forest Law Enforcement, Governance, and Trade (FLEGT)	European Council	2003	EC 2003b
Governance, and Trade (1 BEG1)	NYDF-related policy	documents	
New York Declaration on Forests: Action	United Nations	2014	UN 2014a
Statements and Action Plans			
New York Declaration on Forests: Declaration and	United Nations	2014 (list of	UN, 2014b
Action Agenda		endorsers revised	
		in July 2017)	
U	NSPF 2017-2030 related	policy documents	
United Nations Strategic Plan for Forests 2017–	United Nations	2017	UNFF 2017a
2030. General Assembly Resolution 71/285:			
United Nations Strategic Plan for Forests 2017–			
2030 A/RES/71/285.			
Report of the United Nations Forum on Forests on	United Nations	2017	UNFF 2017b
its 2017 special session, New York, 20 January			
2017, United Nations strategic plan for forests			
2017-2030 and quadrennial program of work of the			
United Nations Forum on Forests for the period			
2017-2020			

Screening and Analyzing Interlinkages in Identified Regimes

I adopted a process-based approach (Picciotto, 2005) to analyze the interlinkages among international forest regimes at the global level, because such an approach addresses the actual sources rather than the symptoms of incoherencies, where the main focus is on the regime setup to attain policy coherence at the policymaking level (Foster & Stokke, 1999). The adoption of a process-based approach compelled me to split the studied regimes into policy objectives and policy instruments, as well as relevance for SFM. I carefully examined the said regimes and the context in which they are used. The content of the policies was analyzed by examining and qualitatively comparing the prevailing policy features, such as policy objectives, policy instruments, relevance to sustainably managed forests, and strategic agendas in relevant policy documents. This approach is the main method used for analyzing textual data (Creswell, 2007), which usually involves examining the prevailing narratives in relevant policy documents.

In retrieving the data, I focused on substantive policy objectives and policy instruments to identify interlinkages and the strategic agendas of the regimes, supplemented by keyword

searches corresponding to each regime studied. Direct and implicit linkages to common keywords in the regimes were noted. I considered these data to be an adequate representation of coherent policy objectives, policy instruments (tools and strategies), relevant strategic agendas, and contributions to SFM espoused in FLEGT, NYDF, and UNSPF policy documents. This content analysis was not intended to provide insights into on-the-ground policy implementation, but to show how far global forest policy objectives and policy instruments are recognized or not in international regime strategic agendas. A weak interlinkage constitutes a primary lack of shared objectives and instruments in the context of strategic agenda consideration in the said forest regime, and the regime may indirectly contribute to that strategic agenda. A strong interlinkage, in contrast, means that international forest-related policy is highly considered within the context of strategic agendas through policy design, and the regime can directly contribute to the given strategic agenda under the wider framework agreement.

Based on the general evaluation criteria in my analytical framework, I adapted a three-point Likert scale to determine and interpret the degree of interlinkages and potential contributions by FLEGT, NYDF, and UNSPF to strategic agendas for promoting SFM as follows (Tegegne, Cramm, & Brusselen, 2018, p. 7):

- (i) Strong interlinkages: a given topical issue is explicitly considered in the form of goals, objectives, or targets that contribute directly to the strategic agenda;
- (ii) Weak interlinkages: a given topical issue is not explicitly considered in a given regime, but its goals, objectives, or targets can contribute indirectly to the strategic agenda; and

(iii) No interlinkages: a given topical issue is not explicitly considered in a given regime, and its goals, objectives, or targets cannot be expected to contribute to the strategic agenda.

Results

This section presents the main contributions of FLEGT, NYDF, and UNSPF to the strategic agendas for promoting SFM and the possible interlinkages among the three regimes. An inventory of policy objectives, policy instruments, and strategic agendas in FLEGT, NYDF, and UNSPF is presented in Appendix B.

Interlinkages Among FLEGT, NYDF, and UNSPF

Table 2.3 provides a summary of the various contributions of FLEGT, NYDF, and UNSPF to the strategic agendas for promoting SFM, all of which are discussed in more detail below.

Table 2.3Contributions of FLEGT, NYDF, and UNSPF to the Strategic Agendas for Promoting SFM

Strategic agenda For promoting SFM	FLEGT	NYDF	UNSPF
Forest loss	Indirect contribution: FLEGT can prevent forest degradation—the loss of forests' capacity to produce essential goods and services—through enhanced forest law enforcement.	Direct contribution: NYDF goal 1 is to halt natural forest loss.	Direct contribution: UNSPF aims to reverse the loss of forest cover or prevent forest degradation worldwide through SFM.
Climate change mitigation & adaptation	Indirect contribution: Not a key topical issue in FLEGT, but ensures legality in the forest sector, which is linked to the maintenance and enhancement of forests and their contribution to the global carbon cycles.	Direct contribution: The aim of NYDF is to reduce emissions from deforestation and forest degradation as part of a post-2020 global climate agreement.	Direct contribution: UNSPF highlights global efforts to prevent forest degradation and contribute to the global effort of addressing climate change.
Forest biodiversity	Indirect contribution: Illegal logging affects forest biodiversity with regard to tree species, and substantial actions under FLEGT attempt to address this issue.	Indirect contribution: NYDF goal 5 is to restore degraded landscapes and forestlands.	Indirect contribution: UNSPF aims to increase significantly the area of protected forests worldwide and other areas of sustainably managed forests.
Finance for forests	Indirect contribution: The means of implementation in a form of finance received due attention in FLEGT, especially capacity building and TLAS developments.	Direct contribution: Mobilization of finance for forests constitutes a primary goal and target of the NYDF	Direct contribution: UNSPF goals and targets have covered new and additional financial resources from all sources for the implementation of SFM

Good forest governance	Direct contribution: FLEGT addresses legality and contains mechanisms related multistakeholder participation, information transparency, and accountability in the forest sector.	Direct contribution: NYDF goal 10 is to strengthen forest governance.	Direct contribution: UNSPF goal 5 emphasizes the promotion of governance frameworks to implement SFM, including through the UN Forest Instrument.
Forest technology transfer	Indirect contribution: A VPA TLAS is built around a wood tracking system for effective supply chain control as a mechanism for verifying compliance.	No contribution: Forest technology is not explicitly considered in the NYDF.	Direct contribution: Technological innovations in the forestry sector are significantly promoted in the UNSPF through international cooperation.

Sources: EC, 2003a, b; NYDF, 2018; Tegegne, Cramm, & Brusselen, 2018; UN, 2014a, b; UNFF, 2017a, b,

Table 2.3 shows the profound interlinkages among FLEGT, NYDF, and UNSPF and their potential to contribute across the multiple strategic agendas discussed below.

Forest Loss

FLEGT makes an indirect contribution to forest loss: It seeks to achieve its policy objectives by addressing illegal logging and the related trade, thereby contributing to reducing forest loss (Tegegne, Cramm, & Brusselen, 2018). A VPA, under FLEGT, deals with the underlying causes of forest degradation, for example, weak forest governance and inconsistent legal and institutional frameworks (Ochieng et al., 2013; Tegegne, Cramm, & Brusselen, 2018).

The NYDF makes a direct contribution to forest loss: It essentially aims to at least halve the rate of loss of tropical forests globally by 2020 and strives to halt natural forest loss by 2030 (UN, 2014a). Additionally, the declaration included the goal to restore 150 million hectares of degraded landscapes and forestlands by 2020, and an additional 200 million hectares of deforested and degraded forestlands by 2030 (NYDF, 2018; 2019). However, progress toward achieving this goal is mixed (NYDF, 2019). For instance, only about 27 million hectares of land have been restored (NYDF, 2019). Moreover, high rates of land cover change may reverse gains, as one third of the countries committed to the Bonn Challenge have experienced forest loss and agricultural expansion that exceeded their restoration commitment area (Fagan et al., 2020).

The UNSPF makes a direct contribution to forest loss: Its strategic plan provides a framework for the implementation of Sustainable Development Goal (SDG) 15, namely the sustainable management of forests. As outlined in the strategic plan, the most relevant global forest goal and associated target are 1 and 1.3, respectively, and they require that by 2020, countries worldwide should "promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and substantially increase afforestation and reforestation" (UNFF, 2017a, p. 3).

Climate Change Mitigation & Adaptation

FLEGT makes an indirect contribution to climate change mitigation & adaptation: The implementation of FLEGT VPA can indirectly support the climate change agenda by, for example, promoting and enhancing compliance with reduced-impact logging (Tegegne, Cramm, & Brusselen, 2018). Generally, VPA countries have focused on undertaking measures such as the implementation of forest management plans that provide environmental benefits and address compliance monitoring of forestry operations that could alter carbon sinks.

The NYDF makes a direct contribution to climate change and mitigation: As indicated in Appendix B, at least goals 1, 7, and 8 are strongly linked to the climate change agenda (UN, 2014a, b). These goals are further translated into quantified emission reduction. According to the NYDF, achieving the goals in the policy document could reduce the global emissions of greenhouse gases by 4.5–8.8 metric tons per year (NYDF, 2018). To put this into perspective, that figure is equivalent to the United States' total annual greenhouse gas emissions.

The UNSPF makes a direct contribution to climate change and mitigation: Its global forest goal 1 and its targets reinforce NYDF goals 1, 7, and 8, which contributes to the achievements of SDG 14, namely take urgent action to combat climate change and its impacts

(UNFF, 2017a). UNSPF goal 1 and its targets specify that afforestation and reforestation may be used to meet emission reductions, and thereby contribute to the global effort to address climate change (UNFF, 2017a). Thus, it can be concluded that the goal of UNSPF directly covers the mitigation of greenhouse gases and the adaptation of ecosystems to climate change.

Forest Biodiversity

FLEGT makes an indirect contribution to forest biodiversity: FLEGT's goal is to combat illegal logging and the associated illegal timber trade (EC, 2003a). In doing so, FLEGT may help protect some tree species threatened with extinction due to overexploitation through rules governing the harvesting of species (Glück et al., 2010). In addition, improving and enforcing national laws catalyzed by the FLEGT VPA process could ensure both the development of forest management plans to determine yield and regulate timber harvesting, and the compliance with their requirements. This management plan also guides the conservation of forest resources by prescribing silvicultural and monitoring schedules (Tegegne, Cramm, & Brusselen, 2018).

The NYDF makes a direct contribution to forest biodiversity: Its goal 6—namely "ambitious, quantitative forest conservation and restoration targets for 2030 in the post-2015 global development framework"—is explicitly linked to forest biodiversity conservation (UN, 2014a; NYDF, 2019, p. 21). Other goals, for example, NYDF goal 1 aimed at stemming tropical forest loss, are linked to global efforts to halt biodiversity loss (UN, 2014a).

The UNSPF makes a direct contribution to forest biodiversity: Its goals are directly related to forest biodiversity conservation; for example, UNSPF goal 3 and related target 3.2, aim to increase significantly the area of forest under long-term forest management plans (UNFF, 2017). In particular, UNSPF goal 1 further demonstrates a strong link to forest biodiversity,

which is encapsulated in the two most comprehensive international treaties on forest biological conservation: The Convention on Biological Diversity and the Aichi Biodiversity Targets 2011–2030 (UNFF, 2017a, b).

Finance for Forests

FLEGT makes an indirect contribution to finance for forests: Its Action Plan seeks to promote market security to ensure that only legally produced timber and timber products are imported into the EU (EC, 2003a; Glück et al., 2010). As suggested by Glück et al. (2010), the VPA process is expected to incentivize legal timber trade by encouraging timber suppliers and consumers to bear the actual cost of timber production as stated in the national laws, rather than seeking only to minimize prices. This incentive (through domestic and international trade, including the payment of fees and taxes) is likely to enhance the contribution of tropical forests to national economies. In VPA countries, the EU provides direct and indirect financial investment to support the VPA process with respect to implementation activities related to the 2013 EU TR—Timber Regulation (EC, 2016).

The NYDF makes a direct contribution to finance for forests: Its most significant goals address the specific commitments with regard to mobilizing finance for forests. NYDF goals 8 and 9 respectively "support the development and implementation of strategies to reduce forest emissions" and "reward countries that by acting, reduce forest emissions—particularly through public policies to scale up payments for verified emission reductions and private-sector sourcing of commodities" (NYDF, 2019, p. 21). The declaration specifically calls for political endorsement for verified forest-related carbon emission reductions and the provision of financial support to reduce emission-related deforestation and forest degradation (NYDF, 2019).

The UNSPF makes a direct contribution to finance for forest: It supports the overall mechanism for reversing the decline in mainstream developmental assistance to SFM, mobilizing new and additional financial resources for implementing SFM (e.g., payment for ecosystem services), and creating monetary value for the carbon stored in forests (UNFF, 2017a, b). This global policy supports national-level strategies to "increase the access of small-scale forest enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets" (UNFF, 2017a, p. 4). Other relevant goals include mobilizing "significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation" (UNFF, 2017a, p. 5).

Good Forest Governance

FLEGT makes a direct contribution to good forest governance: The main goal of its

Action Plan is to promote good governance and enable a legal framework for strengthening SFM in VPA countries by ensuring that EU firms import from producing countries that comply with additional legal and sustainable forest management requirements stipulated in their national forest laws (Glück et al., 2010; Gupta et al., 2013). In doing so, FLEGT builds on and supports the development and implementation of legal, policy, and institutional frameworks for addressing weak forest governance at the national level (Tegegne, Cramm, Köhl et al., 2018; Tegegne, Cramm, & Brusselen, 2018). The VPA process also promotes multi-stakeholder platforms composed of key sectors in forest use, management, and policymaking, as well as increased access to information that can support local democracies in developing countries (Carodenuto, 2019; Overdevest & Zeitlin, 2018). This multi-stakeholder platform is one way of

managing cross-sectorial coordination and overcoming barriers in planning, implementation, and accountability arrangements (Tegegne, Cramm, Köhl et al., 2018).

The NYDF makes a direct contribution to good forest governance: Its goal 10 seeks to contribute to good forest governance (UN, 2014a). NYDF Goal 10 is intended to "strengthen forest governance, transparency, and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources" (NYDF, 2019; p. 21). The underlying rationale is to ensure the existence of equitable rights and the rule of law in the forest sector.

The UNSPF makes a direct contribution to good forest governance: Its goal 5 and related target 5.2 support the enhancement of forest law enforcement and governance by "strengthening national and subnational forest authorities, and significantly reducing illegal logging and the associated trade worldwide" (UNFF, 2017a, p. 5). Target 5.3 further requires that "national and subnational forest-related policies and programs be coherent, coordinated, and complementary across ministries, departments, and authorities, [be] consistent with national laws, and engage relevant stakeholders, local communities, and indigenous peoples" (UNFF, 2017a, p. 5). This target recognizes the 2007 UN Declaration on the Rights of Indigenous People and the 2011 UN Principles on Business and Human Rights (van Dam, 2019), which is also subject of matter of global policy platforms (e.g., the UN Permanent Forum Indigenous issues) around human rights and secure tenure rights at regional, national, and local levels (UNFF, 2017a).

Technology Transfer

FLEGT makes an indirect contribution to forest technology transfer: Although a forest technology transfer agenda is not explicitly captured in FLEGT, a VPA TLAS improves transparency in supply chain management using a wood tracking system, and allows a VPA

country's legality assurance system to differentiate legal from illegal timber and timber products or exclude controversial sources, and to issue FLEGT licenses to legal timber and timber product exports (EC, 2007). The timber verification system is essential for forest inventory/survey, mapping, and stock monitoring (Tegegne, Cramm, & Brusselen, 2018).

The NYDF makes no contribution to forest technology transfer: Although there is no explicit indication of forest technology transfer in the NYDF, the declaration received the endorsement of signatory governments, as well as business and civil society organizations, to contribute to the improvement of technological innovation in the forest sector (UN, 2014a).

The UNSPF makes a direct contribution to forest technology transfer: At its heart are goal 4 and targets 4.3 and 4.5, related to innovation and forests (UNFF, 2017a). Specifically, strategic target 4.3 promotes "North–South, South–South, North–North, and triangular cooperation and public–private partnerships on science, technology, and innovation in the forest sector" (UNFF, 2017a, p. 3). In addition, target 4.5 promotes improvements in "the collection, availability, and accessibility of forest-related information through, for example, scientific assessments" (UNFF, 2017a, p. 5).

In order to achieve the above strategic agendas, the regimes articulate a mix of regulatory, financial, and technical capacity support, and information policy tools with a distinct focus on different policy goals, such as SFM, tackling illegal logging and corruption, and the mitigation of climate change through forest management, and the sustainable development of forests and people. FLEGT focused on the VPA and EU implementing regulations as appropriate policy tools (Glück et al. 2010; Gupta et al. 2013). Although FLEGT is focused on implementing VPA for the overall improvement of the forest governance system, it ultimately includes the policy mix of tools such as TLAS, the information transparency annex, environmental and social

safeguards, independent audit, and multi-stakeholder structures to achieve its policy goals largely in VPA countries (Tegegne, Cramm, & Brusselen, 2018). As policy tools, the EU Timber Regulations (international timber trade instruments) target operators along the production and market supply chain with the aim of improving legal and sustainable forest management. To do this, a VPA sets standards for the social and environmental impacts of timber harvesting operations and processing, and obliges EU timber importers to exercise due diligence, as well as keep records of suppliers and consumers (Gupta et al., 2013).

The NYDF set the goal to end forest loss by 2030. To achieve this, a mix of voluntary instruments are used, focusing on, among other policy tools, political commitments and pledges, codes of conducts and guidelines for information sharing, and financial resources to support national governments and civil society organizations (UN, 2014a, b). The overarching strategic agendas of the UNSPF are further defined by specific targets, as set out in the strategic plan. They include "a global framework for action at all levels to sustainably manage all types of forests and trees outside forests, and to halt deforestation and forest degradation" (UNFF, 2017a, p. 1). In general, the main policy tools for implementation are global strategic actions and programs, funding, information, and education; forest-carbon offsetting; reporting; and capacity and technological transfer in the forest sector (UNFF 2017a). The UNSPF proposes strategic actions; responsibility for implementation rests largely with public and private institutions facilitated by global-level coordination mechanisms such as the UNFF.

To sum up:

1. There are strong interlinkages between FLEGT, NYDF, and UNSPF strategic agendas of good forest governance through the prioritization of shared policy instruments and the promotion of global-scale collaborative platforms. Thus, good

- forest governance is a cross-cutting strategic agenda that overlaps completely within the three studied regimes.
- 2. Thematic financial incentives are recognized as a joint strategic agenda by the NYDF and the UNSPF (but not by FLEGT, which indirectly contributes to finance for forests' agenda) and could trigger strong interlinkages for SFM.
- 3. There are also strong interlinkages between NYDF and UNSPF strategic agendas on forest loss and climate change mitigation & adaptation. With regard to the mitigation approach and adaptation strategies, there are interlinkages between NYDF goal 7 and UNSPF goal 1. Thus, finance for forests, climate change & mitigation, and forest loss are also identified as prospective cross-cutting strategic agendas among the regimes.
- 4. There are weak interlinkages between biodiversity strategic agendas in FLEGT, NYDF, and UNSPF. The interlinkage between the FLEGT and the UNSPF forest technological innovation agenda is weak. The development of cross-cutting strategic agendas is a good inter-institutional learning strategy for global forest governance because they create a focus for a unified international forest policy (Maguire, 2013).
- 5. While FLEGT is necessarily more legality mechanism-centered than the NYDF and the UNSPF, the latter policy tools are synergic, with similar overarching policy objectives. However, there are strong interlinkages among the policy instruments of FLEGT, NYDF, and UNSPF regarding financing mechanisms, capacity building/transfer, and information sharing.

6. Furthermore, there are weak interlinkages between the policy instruments of FLEGT, NYDF, and UNSPF related to political support, forest law enforcement, forest restoration activities, coordination mechanisms, and carbon offsetting.

Discussion and Emerging Issues

In this section, I discuss the possible interlinkages among FLEGT, NYDF, and UNSPF, as well as the implications for managing interlinkages resulting from strategic agendas.

Interlinkages

Interlinkages usually arise at all governance levels in connection with specific issues or strategic agendas (Gomar et al., 2014). My analysis revealed that FLEGT, NYDF, and UNSPF could contribute to similar strategic agendas of SFM, namely forest loss, climate change, good forest governance, and finance for forests. Of particular relevance to international organizations, policymakers, and practitioners is the development of cross-cutting strategic agendas, such as good forest governance and finance for forests. For example, FLEGT (through policy, legal, and institutional reforms in VPA countries), the NYDF (political will from a broad network of transnational actors), and the UNSPF (through enhanced cooperation, coordination, and synergies of forest-related polices at all levels) have strong links with good forest governance. Therefore, promoting good forest governance anywhere requires paying greater attention to avoiding duplications and conflicting regimes not only across international institutions, but also within the same regimes for effective policy implementation in domestic settings (Cashore, 2009).

Finance for forests constitutes an important aspect of many umbrella initiatives at the global level, simply due to their general relevance to SFM (Humphreys et al., 2019; Locatelli et al., 2016). However, not all sustainable development finance promotes SFM (Humphreys et al.,

2019). For example, the target of increasing funding to address SDG 2 ("End hunger, achieve food security and improve nutrition and promote sustainable agriculture," see UN, n.d.,

Sustainable Development Goals section) often promotes the conversion of forests to agriculture development (Humphreys et al., 2019). In some specific national contexts, it may be necessary to stimulate an inter-sectoral dialogue on what constitutes sustainable and unstainable finances for forests. The implication is that attention should be paid to the larger international financing regimes, in particular the agro–forestry interface, with an emphasis on sustainable agricultures—a prerequisite for achieving zero net deforestation (Humphreys et al., 2019). While the generic targets of the UNSPF and the NYDF with respect to the finance for forests agenda may be too vague to guide policy implementation at the national level, the key seems to be a systematic and coordinated approach to the harmonized implementation of all fulfilled financial pledges for SFM.

In general, as these policy objectives become wider to cover a larger number of elements, they interlink or appear to mutually reinforce the need to globally manage forests according to SFM principles. My observations about existing interlinkages provide convincing reasoning that the overarching objectives of FLEGT, NYDF, and UNSPF focus on or relate to much broader aspects of SFM, such as 'the totality of principles and procedures' expressed within the international forest regime. This finding also confirms that the net contribution of international forest policies to improving SFM remains their common objective, even though the policies do not always overlap (Braatz, 2002; Ledoux et al., 2000; Tegegne, Cramm, & Brusselen, 2018). Thus, the FLEGT, NYDF, and UNSPF key policy objectives are aligned with SFM in addressing sustainability. Such objectives are generally supported by all actors with a stake in the forest sector, and in other sectors, at national and international levels with the primary purpose of

creating a climate of mutual understanding (Glück et al. 2010; Haug & Gupta 2013).

However, while the key objective of FLEGT is focused on timber legality verification and international trade (EC, 2003a), it reveals some potential contradictions with NYDF and UNSPF goals to halt tropical forest loss (UN, 2014a, b; UNFF, 2017a). For example, my findings revealed that FLEGT's main policy objective is to promote the demand for verified legal timber, which may not ultimately or directly contribute to halting forest degradation or reducing emissions from deforestation and forest degradation. Thus, FLEGT's focus on legal timber may run counter to halting global forest loss or achieving a quantified emissions reduction or sustainability without strong compliance and environmental safeguards. This should not raise any question as to which policy objective should be overriding, since promoting the legal timber trade under the FLEGT process does not prevent it from promoting sustainability. Arguably, there is no more critical aspect to managing interlinkages than the adjustment of policy tools and strategies for achieving both legality and sustainability, or internalizing good forest governance in order to achieve appropriate policy implementation in many domestic settings (Cashore, 2009). To design new or adjust existing policy tools, it is important not only to engage in dialogue with experts at the global level, but also to engage key stakeholders at the national level for policy feedback.

SFM remains a crucial element in relation to global environmental issues, for example, the fight against forest loss, carbon emission reduction, and climate change mitigation (Cerutti et al., 2020). Consistent with my analysis, the blueprint for FLEGT, NYDF, and UNSPF further underlines a number of strategic agendas for SFM, wherein the three regimes advocate an integrated approach to biodiversity conservation and climate change mitigation. This integrated approach is critical for advancing the SFM agenda and would undoubtedly include the

development of forest sector technology, such as timber legality verification systems, remote sensing, and terrestrial laser scanners in various national forests for monitoring and land-use change tasks. One of the critical technological applications would be to ensure timber legality verification and technical support to improve the monitoring, verifying, and reporting of global emissions from deforestation and forest degradation. This advancement is expected to help create incentives to ensure legal timber trade and the accurate measurement of emission reduction, while maintaining and improving forest ecosystem services. For instance, the goal of the NYDF and the UNSPF related to climate change agendas sets targets and timelines for halting deforestation and achieving emission reductions.

While such valuable tools can serve this acute purpose in the forest sector, their implementation requires human resources and agencies with the appropriate technological capabilities to perform the required functions, all of which is lacking in developing countries (Hetemäki et al., 2010). Thus, in order to achieve the strategic agendas of FLEGT, NYDF, and UNSPF for SFM, the technological and related critical capacity deficits in developing countries contexts need to be addressed. This is in line with the position of the UNFF (2017a), namely that the effective implementation of SFM is critically dependent upon the transfer of environmentally sound technologies, capacity development for their implementation, and the mobilization of financial resources for developing countries. Hence, technology and related resources must be a key consideration in solving the challenges we face in managing forests, improving information transparency, and increasing the efficiency forest governance in developing countries and beyond (Carodenuto, 2019; Hetemäki et al. 2010).

The Bigger Challenges: Managing the Interlinkages

My analysis shows that SFM is an important synergistic interlinkage among FLEGT,

NYDF, and UNSPF. In this research, I propose three approaches to harness their interlinkages. First, my inventory (see Appendix B) provides insights to guide the EU and the UN interest in combining different instruments that generate synergistic systemic effects in an interactive way. It follows that the UNFF and the EU, as network actors engaging in and disseminating information on SFM at the global level, should organize their systemic effect strategies in a way that promotes forest policy coherence based on the identified strategic agendas (McDermott et al., 2010).

It is important to note that the Collaborative Partnership on Forests (CPF) has already taken measures to ensure a coordinated and harmonized approach to SFM, by introducing coordination mechanisms in member organizations (McDermott et al., 2010; van Dam, 2019). Using the CPF as a reference point, policymakers can build on the early gains to further enhance policy coordination among the international forest regimes. This should serve as a springboard to leverage policy coordination with all the other international forest regimes. I expect that interlinkages at the international level will be achieved if policy feedback through a dialogue platform is effectively pursued to better understand the important strategic agendas of international forest regimes. This policy feedback can make policy actors more knowledgeable of the interlinkages among FLEGT, NYDF, and UNSPF, particularly at the national and subnational levels. The basis of such dialogue platforms should stem from inter-institutional learning. As argued by Gehring and Oberthür (2009), such inter-institutional learning can only take place where institutional policy objectives and instruments are complementary to similar strategic agendas, as in FLEGT, NYDF, and UNSPF. In order to address relevant issues of this policy setting, parliaments at the national level should mainstream the global-level policies, with forest-related institution nationally and locally adapting them for implementation.

Second, taking the twin strategic imperatives together helped me to explain why interlinkages could also be managed at the operational level. Interlinkages can be better managed at the operational level by clarifying the potential relevance of FLEGT, NYDF, and UNSPF in political, economic, fiscal, and ecological contexts, and how they could be supportive of the implementation of national forest strategies and plans. Alternatively, I argue from a top-down pathway of influence perspective (for details, see Bernstein & Cashore 2012) that interlinkages among the said regimes can be nationally driven, by combining international and national rules, resources, competencies, and skills to support the implementation of other programs. This is particularly important in an international regime context where global-level policy processes and outputs at the national level influence each other.

It is suggested, however, that feedback loops between such governance levels must be strong enough to interlink international regimes and national forest policies (Gomar et al., 2014). As such, policymakers at both the international and the national level should explore further information sharing and reporting systems as one of the most preferable policy instruments found in this research. This can support an inter-sectorial coordinated approach to designing coherent forest policy with realistic expectations and the mechanisms necessary for its implementation at the national level. However, "leveraging interlinkages [further] requires true political leadership, with better policy coherence and coordination as a means to achieve overall objectives focused on outcomes rather than processes" (UN High-Level Political Forum (HLPF) on Sustainable Development, 2017, p. 11). Therefore, in order to manage interlinkages at the international and national levels, representation from and interaction between policymakers, implementers, and political actors is imperative. It is thus essential that policymakers pay careful attention to political, social, and economic priorities and contexts at the national level, where

most international regimes are implemented.

In addition to understanding some of these key country-specific political, social, economic, fiscal, and ecological priorities, how other global forest policy instruments might support these national strategic plans needs to be clarified. This may involve the development of additional and innovative financial resources needed by national governments for implementation, especially in developing countries. Also, such innovative financial mechanisms are still the subject of ongoing discussion (Singer, 2016) and a challenge, as tropical forests continue to receive only low levels of sustainable private investment (Humphreys et al., 2019). Further, the Global Environmental Facility (GEF) and other forest-related partnership offer some opportunities for developing countries. For example, with nearly US\$ 500 million from diverse funding sources (GEF, 2015), the GEF announced a program to eliminate deforestation from global commodity supply chains (Humphreys et al., 2019).

What is needed to enhance such innovative means is strong institutional commitments to expand formal funding legally and efforts to bridge the gaps between international pledges and disbursed funds (Humphreys et al., 2019). Here, there is a crucial need to align or harmonize fulfilled financial pledges for policymakers to manage interlinkages and further strengthen policy coherence at all governance levels. In realizing successful means of implementation around SFM, developing countries need capacity support to formulate the right mix of policy instruments in order to benefit from financial mechanisms at the global level. In addition, forest investment programs (e.g., payments for ecosystem services) are likely to be forthcoming if there are enabling institutional conditions: countervailing policy, transparency, accountability, and the participation of stakeholders and their institutions (Castrén et al., 2014). This calls for innovative policy initiatives in increasing domestic financing for SFM. Dealing with corruption, which often

thwarts potential capacity for mobilizing domestic forest taxes, requires equal attention.

Overall, my discussion highlights the profound interlinkages among and the potential contributions of FLEGT, NYDF, and UNSPF to the larger goal of SFM. These interlinkages lie particularly at the level of policy goals and targets (e.g., NYDF and UNSPF), where there are overlaps between policy objectives, which appear to be strongly linked to almost all strategic agendas, in particular finance for forest and good forest governance agendas. Managing interlinkages effectively is essential to the promotion of sustainably managed forests, and strategies for SFM should consider interlinkages among these global-level policy developments and other international commitments (e.g., SDGs). Finance for forests and good forest governance could enable the global partnerships for SFM as a preferred avenue to coordinate the remaining strategic agendas in a mutually supportive manner for implementation at the national level. Notwithstanding the interlinked nature of the regimes studied and their potential contributions to critical global forest strategic agendas, the NYDF and UNSPF were consistently noted as mutually reinforcing and they should be implemented in a complementary manner. This is critical to policy implementation at subnational and national levels.

Conclusions and Recommendations

The present research examined interlinkages among FLEGT, NYDF, and UNSPF at the global level at two critical policy levels, namely policy objectives and policy instruments. A process-based approach was used to deconstruct and match the core attributes of the three regimes studied with their policy objectives/strategic agendas and policy instruments. The results highlighted that interlinkages can be found in the policy objectives of the three regimes, as they target cross-cutting strategic agendas for promoting SFM—a fundamental requirement of international forest regimes. The analysis also revealed a number of interlinkages among

FLEGT, NYDF, and UNSPF policy instruments. In particular, FLEGT, NYDF, and UNSPF share inherent interlinkages of policy instruments, such as information sharing, strategic plans, and financial and capacity support.

Many of the policy objectives and instruments studied make either direct or indirect contributions to the six identified strategic agendas. The interlinkages among these policy instruments could produce synergies in the pursuance of several strategic agendas, namely forest loss, climate change mitigation & adaptation, forest biodiversity, finance for forests, good forest governance, and forest technology transfer. Surprisingly, the issue of interlinkages has not been filtered into important strategic agendas such as forest technology transfer. For example, the NYDF does not yet play a substantial role in technology transfer in the forest sector, but it is explicitly recognized in FLEGT and the UNSPF as enhancing sustainable forest management benefits. To be utilized to find solutions for ensuring the identified strategic agendas, forest technology transfer must be brought to bear on national- and global-level forest strategies, with capacity support made accessible to all, particularly in developing countries.

The only strategic agendas that have been widely recognized as underpinning all the conservation and forest management discussed in this dissertation are the four cross-cutting strategic agendas, that is, good forest governance, finance for forests, climate change mitigation & adaptation, and forest loss. This finding has implications for managing interlinkages and for efforts to realize policy coherence at the international level. The main reason is that, for example, finance for forests and good forest governance norms are seen as enabling conditions for SFM, and they are cross-cutting issues that can potentially advance the 2030 Agenda for Sustainable Development.

Maximizing interlinkages would necessarily require additional institutional efforts at the

global and national levels. Therefore, I recommend the following measures at the international institutional level to further manage the potential interlinkages:

- 1. Promoting inter-institutional learning (including policy transfers and innovations) and leveraging interlinkages among FLEGT, NYDF, and UNSPF within the current climate change governance framework. This inter-institutional learning should include precise strategic guidelines to support international stakeholder forums on how to work with each other to foster national level interlinkages. Effective inter-institutional learning requires dialogue and coordinated actions, with a focus on achieving cross-cutting strategic agendas (e.g., finance for forests and good forest governance) and benefiting from interlinkages rather than a single global-level policy development. The cross-cutting strategic agendas are fundamental issues that all forest governance institutions at all levels should work to improve.
- 2. Building political commitment and strengthening legitimacy in international cooperation via the CPF is crucial, especially in the light of cross-cutting strategic agendas for forest policy coherence learning. Interlinkages among international forest regimes would be enhanced if political support attributed to the CPF were further strengthened. This is expected to bolster capital and political leverages, as well as the means of implementation.
- 3. Managing interlinkages also critically depends on capacity to boost the achievement of synergistic policy outcomes in the long term. Therefore, more focused capacity building support is required within FLEGT, NYDF, and UNSPF. A high priority should be given to the knowledge and know-how required to understand the complexity of the interlinkages and the application of forest technology in the global

South.

4. Aligning finance and pledges for forests is critical for managing interlinkages. This alignment includes analyzing the effectiveness of measures in leveraging sustainable investments, building effective private—public partnerships for the development of the forest sector, and developing coherent measures to support forest governance goals.

A limitation of this analysis is that it was limited to only global-level policies while excluding national policy. It is therefore imperative to note that my findings are not conclusive on policy implementation because of my focus on global-level forest policies. Furthermore, I did not examine whether the interlinkages among FLEGT, NYDF, and UNSPF extend to the domain of national forest policies. Also, the NYDF and the UNSPF contain a wide range of goals and targets, and it is a challenging task to analyze them all in detail. However, in terms of strengthening forest policy coherence at the global level, I provide important subtleties around interlinkages among the policy objectives and policy instruments of FLEGT, NYDF, and UNSPF. I do so because: (a) The overarching goals of such global forest policy guides national-level forest strategies, and (b) realizing interlinkages among FLEGT, NYDF, and UNSPF policy instruments (capacity, information sharing, and reporting) and cross-cutting strategic agendas, are important means for strengthening national forest strategies implementation.

In addition, given that the criteria of interlinkages are constantly changing and evolving, it follows that my findings are not generalizable across time. However, researchers could follow the methodological approach of Magliocca et al. (2018) to generalize a similar qualitative review. Consistent with my analytical framework, their approach highlights a set of comparison elements that researchers often overlook when analyzing interlinkages at the global level and

how global level governance influence national-level policies, and vice versa. Such an approach suggests future research outlooks: What determines the effectiveness of strategies for managing interlinkages, and when are such strategies desirable? This paper only presented results based on qualitative research, which implies some level of subjectivity in my content analysis and interpretation of the findings.

Chapter 3: A Comparative Analysis of the Institutional Capacity of FLEGT VPA in Cameroon, Central African Republic, Ghana, Liberia, and the Republic of the Congo

Abstract

Illegal logging has received international attention in recent years. For instance, the aim of the European Union Action Plan on Forest Law Enforcement, Governance and Trade Action Plan (FLEGT) and its Voluntary Partnership Agreement (VPA) is to combat illegal logging and foster good governance and trade in legal wood products. Using a theoretically framework derived from literature on institutional capacity for "good forest governance," I conducted a comparative analysis of the potential and realized capacities of VPA processes for advancing principles of good forest governance and the implementation of the Timber Legality Assurance System (TLAS) in Cameroon, Central African Republic (CAR), Ghana, Liberia, and the Republic of the Congo (Congo), as well as the challenges that hinder the implementation of VPAs. Based on information gathered from multiple sources, I found that VPA processes do have potential capacities for advancing information transparency, multi-stakeholder participation, and TLAS. Important progress is, however, constrained by complex political and technical issues. Unlike in Ghana, Liberia, and Congo, where progress and realized capacities are more pronounced, the realized capacities of VPAs in Cameroon and the CAR are limited. While there are prospects for making progress in these latter countries, such challenges as weak and inconsistent legal frameworks, insufficient financial resources, and long-term conflicts have slowed down the implementation of VPAs. Modest investment in capacity building and enhanced political will could have a significant effect on the realized capacities.

Keywords: EU FLEGT, VPA, Good forest governance, Institutional capacity, Sub-Saharan Africa

Introduction

Since the 1990s, the international community has launched several policy interventions to address illegal logging and promote sustainable forestry. For instance, the World Bank introduced the Forest Law Enforcement and Governance (FLEG) initiatives to tackle illegal logging. These initiatives included a series of regional Ministerial Conferences in Africa, Asia, and Eastern Europe, which created political space for and consensus on the need to address the problems of illegal logging (Eba'a Atyi, 2018). While FLEG initiatives have been one of the most important actions in these regions, efforts to strengthen timber legality compliance and trade controls along the global supply chain remain limited (Cashore & Stone, 2012). The FLEG initiative in Africa, for example, has been weakened while the quantity of illegally harvested timber is still growing rapidly in national and intra-African markets (Eba'a Atyi, 2018). This situation creates a strain on forest conservation and forest-dependent livelihoods in sub-Saharan Africa (Eba'a Atyi, 2018).

At the general level, the FLEG appears to be similar to the EU Action Plan FLEGT. The Action Plan is the EU's response to the problem of illegal logging and associated trade in timber and timber products (EU FLEGT Facility, 2018a). The FLEGT Action Plan includes actions to engage the EU in joint work with timber exporting countries with a view to improving forest governance and reducing the trade in illegal timber and timber products. In this article, I focus on the FLEGT, which arose out of the FLEG decision in 2003 to strengthen legality verification and promote good forest governance. Unlike the FLEG initiatives, the FLEGT has a strong focus on strengthening legal trade between the demand-side countries in the EU and supporting supply-side countries to improve governance in the forestry sector (Colchester, 2006; Bollen & Ozinga, 2013).

A central component of the Action Plan is the Voluntary Partnership Agreement (VPA), which is a legally binding bilateral trade agreement between the EU and a timber-exporting country outside the EU (hereinafter 'VPA country'). The aim of a VPA is to ensure that timber and timber products imported into the EU from a partner country comply with the laws of that country. Among key elements of a VPA include (a) the Timber Legality Assurance System (TLAS), which verifies legality throughout the value chain—from tree felling to export of the finished products—and issues verified legal timber products with 'FLEGT' licenses, and (b) commitments to public disclosure of information and other improvements to forest governance.

Yet, without capacity building in VPA countries, the quest for negotiations on and the implementation of VPAs is a fruitless goal pursuit (Tegegne, 2016; Carodenuto & Cashore; 2018; Cashore et al., 2016). The FLEGT Action Plan recognizes the importance of capacity development in meeting its measures, and therefore promotes capacity building for the public forestry sector, civil society, and the private sector in VPA countries (EC, 2003a). As a consequence, VPA countries have received significant EU funds and other international financial support for capacity development to support the negotiation and implementation of VPAs (EC, 2016). Despite the financial investment, the legality verification systems are yet to be finalized and operationalized in several African countries (Karsenty, 2019). At the moment (May 2020), only Indonesia is able to issue FLEGT licenses. Five other countries—Cameroon, CAR, Congo, Ghana, and Liberia—are currently implementing VPAs, while VPAs have been agreed in Guyana, Honduras, and Vietnam but not yet signed or ratified (EU FLEGT Facility, 2020b). Six other countries—Côte d'Ivoire, Democratic Republic of the Congo, Gabon, Laos, Malaysia, and Thailand—are still in the negotiation phase (EU FLEGT Facility, 2020b).

Why Does Institutional Capacity Assessment Matter?

Influencing policy areas with different sets of capacities and institutional arrangements is perhaps the biggest challenge of international commitments to regulate the forestry sector (Cashore, 2019; Maguire, 2013; Minang et al., 2017; Tegegne, 2016). Progress in the negotiation and implementation of VPA processes requires an adequate level of capacity to change the business-as-usual situation in the forest governance of VPA countries (Hansen et al., 2018). Continuous capacity building as roles change is a key factor in the extent to which institutions can acquire, improve, and retain the technological innovations and other resources needed to implement VPAs (Cashore, 2019; Bollen & Ozinga, 2013; Tegegne, Cramm, & Brusselen, 2018). As an institutional approach, capacity assessments have the potential to improve policy actions by providing useful insights into the specific capacity required in all phases of a policy process (Willems & Baumert, 2003). Any policy process requires different functions to be performed to achieve a particular outcome, but in some cases, national institutions have an imbalance in capacities to perform efficiently (Willems & Baumert, 2003). Yet, the application of different capacities is of limited use when trying to explain why institutions fail to achieve policy goals or why policies fail to deliver (Howlett & Ramesh, 2015). Some scholars argue that the introduction of new and multiple regulations and related technologies at the country-level often outperforms the resources and capacities of institutional mechanisms required to cope with their implementation (Rayner & Howlett, 2009). Other scholars state that the degree to which policies may be adopted and applied is a function not only of institutional capacity, but also of complicated interrelated country-specific contextual factors, such as political, social, legal, structural, and financial factors (Willems & Baumert, 2003). For instance, the structure of the forestry sector, the governance and historical contexts, the complexity of the timber supply

chain, the institutional framework, and the capacity of different stakeholders may undermine the implementation of VPAs (Bollen & Ozinga, 2013).

The outputs of VPAs are filtered through the above contextual factors and manifest themselves in the governance arena for implementing VPAs, with the potential to create barriers or enable an effective legality assurance system (Carodenuto & Cashore, 2018). By taking the institutional settings into account, it is possible to offer a more holistic explanation for the challenges of VPA processes and their link to critical capacity issues (Minang et al., 2017). Studies on institutional capacity are less known, particularly on the institutional capacity of developing countries, where they are greatly needed (Cerutti et al., 2013; Cerutti et al., 2014; Dang et al., 2016). Furthermore, no study has rigorously explored the potential and existing institutional capacities that may leverage VPA promises into progress in sub-Saharan Africa. Against this background, the aim of the present study was to:

- Analyze the institutional capacity of the VPA process to advance good forest governance and implement a functioning TLAS in Cameroon, CAR, Congo, Ghana and Liberia.
- 2. Provide insights into the challenges of realizing the potential capacity of the VPA process in sub-Saharan Africa and elsewhere.

This article presents an analytical framework that identifies two main components of institutional capacity, namely potential and realized capacities. This capacity distinction allowed me not only to assess institutional capacity, but also to ask whether there are common challenges to realizing potential capacities regardless of early ratifications and different institutional settings. My qualitative exploration approach was modest, considering the methodological implications: a desk review of policy documents, a meta-analysis of VPA cases in Africa, and

interactions with focal persons to obtain new insights into progress around VPA implementation, as well as to describe capacity aspects of VPA and current challenges. I do not go into a detailed assessment of the institutional components in all five African countries because of time and resource constraints, but provide a generic overview to inform further research. I do, however, explore the different experiences and lessons in the African regional block, and thereby contribute to a better understanding of emerging issues in VPA countries. Overall, I used the analytical framework to improve our understanding of institutional capacity for advancing good forest governance as they influence and are influenced by complicated political-economic and historical trajectories.

The article is organized as follows. In section 2, I present the theoretically derived concepts of institutional capacity that I used to inform my analytical framework. I explain the methods in Section 3 and present my main findings in section 4. In Section 5, I discuss my findings and provide some policy implications. In section 6, I conclude the paper and offer some recommendations. I address the limitations of the study in Section 7.

Theoretical and Analytical Framing: Institutional Capacity for "Good Governance"

There are several conceptualizations of institutional capacity as a process and a general approach to "good governance" (Gisselquist, 2012). Although the concept of "good governance" is highly contested in developing countries (Gisselquist, 2012), it has been underlined that such governance is contingent on institutional capacity (Hope, 2009). As a result, the practice of "good governance" has shifted toward recognizing the critical role of capacity building of institutions as increasingly important for delivering policy outcomes (Hope, 2009). Generally, the concept of "institutional capacity" refers to the extent to which actors develop and apply rules and procedures in order to solve collective problems (Cornell, 2002; Wickham et al., 2009).

Capacity for advancing "good governance" relates to a multitude of actors and institutions operating at different levels of governance, whose actions and interactions are defined by different interests, agendas, and power structures (Fukuyama, 2013; Lemos & Agrawal, 2006; Tacconi et al., 2003). At the policy level, however, the discourse about good governance is limited to a handful of so-called principles of good governance that usually include transparency, accountability, and participation (Cronkleton et al., 2008). Where these principles are lacking, governments often fail "to achieve and sustain a climate of good governance" (Hope, 2009, p. 728). In turn, it means that good governance can be practiced in the environments of institutions where capacities, such as human resources capacities, exist (Hope, 2009). If such potential capacities are absent, policy actors' efforts do not lead to their realized capacities for exercising transparency, accountability, and participation.

While the climate of good governance allows policy actors to develop strategies that can help implement VPA requirements, assessing the institutional capacity of a VPA requires a review of existing theoretical thinking in which potential and realized capacities are envisioned. Drawing on Li and Zusman (2006), potential capacity relates to having impressive regulations (in this article context, VPAs), while realized capacity refers to how VPAs are translated into concrete operational programs, such as TLAS. There are, however, disagreements in the literature about the nature of these capacities (Li & Zusman, 2006). On the one hand, Sokolow (1979) argues that potential capacity and realized capacity are not related, while Li and Zusman (2006) disagree that potential capacity has net positive impacts on realized capacity. Although the two groups of capacities are interrelated components of institutional capacity, they are not synonymous. Intuitively, a potential capacity may exist in institutions, but actors may not recognize or develop strategies to take advantage of such policy interventions or unleash sources

of underutilized capacity for institutional uptake. Additionally, few scholars have questioned the socioeconomic context as an important determinant of actors' interactions and potential capacities (González & Healey, 2005). Conversely, others posit that the socioeconomic context influences institutional capacity (Grindle, 2007; Healey, 2006; Phelps & Tewdwr-Jones, 2000). In this article, I argue that potential capacities are likely to be least effective if they do not consider the larger complex, dynamic social-political systems in which the VPAs are implemented. The main assumption is that VPAs occur in political contexts beyond institutional settings (Hirons et al., 2018; Satyal, 2018).

My theoretical model distinguishes two interrelated capacity aspects, namely potential capacity and realized capacity, which appear to represent the basic capacity process underlying VPA, and therefore driving their association with the criteria in Table 3.1. In this article, what VPA countries may be able to do relates to the realization of their potential capacity. Thus, this model provides better analytical traction to determine what is working well, and what kind of capacity needs to be improved. I present the analytical framework for assessing the institutional capacity of VPAs in Table 3.1.

Unpacking Criteria and Indicators for Assessing Institutional Capacity for Good Forest Governance

To assess how the principles of good governance and TLAS are applied in the five VPA countries, I used the good governance framework of the Program on Forests and the United Nations Food and Agriculture Organization (PROFOR/FAO, 2011). This framework provides six key principles of good governance: (a) accountability, (b) effectiveness, (c) efficiency, (d) fairness and equity, (f) participation, and (g) transparency. These six principles interweave with three core pillars of forest governance:

- 1. Policy, legal, institutional, and regulatory frameworks;
- 2. Planning and decision-making processes; and
- 3. Implementation, enforcement, and compliance.

In this paper, I consider the capacity of VPA processes to advance the transparency and participation of state and non-state forest sector stakeholders in the VPA countries, as these are the prioritized principles that the EU explicitly promotes in the FLEGT Action Plan (Bollen & Ozinga, 2013; EU, 2019). More importantly, a lack of transparency and of participation among forest sector stakeholders have been identified as some of the most important barriers to effectively implement the VPAs (Lesniewska & McDermott, 2014; Corodenuto, 2019).

The capacity of VPAs to increase *transparency* refers to ensuring the clarity of decision-making processes and that state and non-state stakeholders have access to forest-sector information at national and local levels. The VPAs require that procedures for regulatory process and decisions be open and clear to both state and non-state stakeholders (Othman et al., 2012). Transparency also ensures that the VPA process is perceived as legitimate by all concerned stakeholders (Kishor & de Rijk, 2014). In this article, I focus primarily on information transparency, that is, disclosure mechanisms that provide access to information about forests and VPA decisions to relevant state and non-state stakeholders.

The capacity of a VPA to advance *stakeholder participation* is considered a key normative principle that is embedded in the VPA negotiations and implementation process (Lesniewska & McDermott, 2014). "The EU advocates broad stakeholder participation in negotiating and implementing a VPA in order to ensure an agreement is credible" (EU FLEGT Facility, 2018a, see Participation section). Participation encompasses the active consultation and

engagement of stakeholders in the VPA processes. In this article, I focus on the existence of functioning mechanisms to bring stakeholders to the dialogue platform on the VPA process.

In this article, I also focus on the extent to which TLAS is developed and applied in the five VPA countries. A TLAS forms the core of a VPA. "The VPA annex on the TLAS describes how, in practice, a VPA country's legality assurance system will differentiate legal from illegal timber and timber products, and how the country will issue FLEGT licenses to legal products" (EU FLEGT Facility, 2018b, see Legality Assurance System section). TLAS includes five elements: (a) a legality definition; (b) control of the supply chain using a wood tracking system (WTS) for monitoring the movement of timber and wood products from the forest or point of import to the point of export or sale on the domestic market; (c) verification of the supply chain as set out by the WTS; (d) the issuance of FLEGT licenses; and (e) an independent audit of the TLAS by a third party (EC, 2007). As these elements in the VPAs are extensive and detailed, I examined progress in developing and deploying TLAS, which encompasses a wood tracking system for tracing all timber from the point of harvest to export.

Table 3.1Analytical Framework for Assessing Capacity for Advancing Principles of "Good Forest Governance" and TLAS in the VPA Process

Dimension	Criteria	Indicator	Potential capacity characteristic	Interpretation
Good forest governance	Transparency mechanisms in the VPA process	Disclosure of information on VPA-related activities	Information disclosure mechanisms do not exist Information disclosure mechanisms are under development Information disclosure mechanisms exist but not functional Information disclosure mechanisms accessible to only a few stakeholders Information disclosure mechanisms are accessible to most stakeholders	Very low existing/realized capacity Low existing/realized capacity Medium existing/realized capacity High existing/realized capacity Very high existing/realized capacity
	Participation mechanisms in the VPA process	Existence of participation mechanisms for multi-stakeholder VPA process	Participation mechanisms do not exist Participation mechanisms are under development Participation mechanisms established but not frequently applied Participation mechanisms well-established but not accessible to all forest sector stakeholders Participation well established, frequently applied, accessible to all forest sector stakeholders	Very low existing/realized capacity Low existing/realized capacity Medium existing/realized capacity High existing/realized capacity Very high existing/realized capacity
Functional timber verification system	Timber traceability and monitoring system	TLAS developments and deployment	No TLAS established TLAS under development TLAS developed but not operationalized TLAS developed and deployed nationwide A fully functioning TLAS for issuing FLEGT licenses exists	Very low existing/realized capacity Low existing/realized capacity Medium existing/realized capacity High existing/realized capacity Very high existing/realized capacity

Source: Author

Research Design: Study Area and Methods

I designed the study as an exploratory multiple case study. A case study is "as an empirical inquiry that investigates a contemporary phenomenon in its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2003, p. 13). To understand the complexity of a VPA's progress, I examined the phenomena of potential and realized capacities, and challenges to progress on the VPA process. As shown in Figure 3.1, the case study covered Cameroon, CAR, Congo, Ghana, and Liberia, because these are forest-rich states that have signed, ratified, and started VPA implementation. Accordingly, I used the five countries to explore the particularity—that is, the uniqueness—of VPA countries' potential capacities and to illustrate different aspects of institutional challenges. Another equally important reason is that these countries, like other tropical forest countries, are the focus for legal and sustainable forestry implementation activities because of deforestation and illegal logging (Bernstein & Cashore, 2012). Moreover, timber-producing tropical countries were an early target for the FLEGT (EC, 2003a). Therefore, the selected countries have different experiences and lessons that are worth examining for mutual learning and institutional redesign.

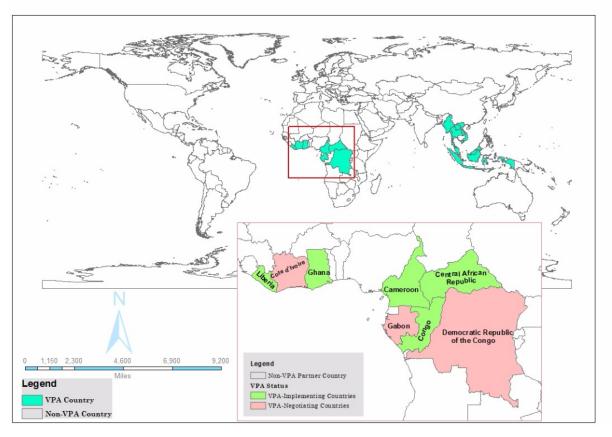


Figure 3.1. Map showing VPA countries in sub-Sharan Africa. (Source: Author Map produced using ArcGIS 10.6 suite package and datasets from http://diva-gis.org/).

Drawing on a similar qualitative method used to study institutional effectiveness in the context of Reducing Emissions from Deforestation and Forest Degradation (REDD+) in developing countries (Ochieng et al., 2016), a review of official policy documents (see Appendix C) related to VPA process was undertaken. This choice of document review allowed me to gain insights into the progress of VPA implementation in sub-Saharan Africa, and to analyze the institutional capacity of VPA countries and the challenges facing the VPA process. I relied on the EU FLEGT Facility (which is hosted at the European Forest Institute) and its website, online Briefing Notes, and aide-mémoire, as well as specific VPA countries' documents and reports. I also reviewed and cross-referenced relevant documents from the EU FLEGT Facility and VPA countries with Independent Market Monitor reports of the International Tropical Timber

Organization (ITTO). These were complemented by meta-analysis of relevant reports by Brack, and Léger (2013), Eba'a Atyi (2018), EU (2019), Karsenty (2019), Pepke et al. (2016), Vandenhaute, et al. (2014), Tegegne (2016), EC, (2016), Minang et al. (2017), and the New York Declaration on Forests (NYDF 2018; 2019). The data for these studies were semi-structured interviews complemented with a review of scientific and grey literature.

The desk study and meta-data analysis were complemented by informal interactions (between September 2019 and October 2019) with experts directly involved in the VPA processes. In this article, focal points are lead policy actors (e.g., government authorities in VPA countries) with extensive knowledge based on their position in and experience of a country's VPA process. These interactions generally lasted 20–30 minutes, with questions designed to elicit information on progress and key issues that these policy actors could identify as essential for improving forest governance. Most of these informal interactions were not recorded because of the politically sensitive nature of the VPA process. However, notes were taken during and immediately after each interaction. I believe that, together, these studies allowed a better understanding of the progress the VPA process had made to date and the main challenges hindering the implementation of VPAs.

Based on the general criteria in my framework to qualitatively analyze the policy documents, I used a content analysis approach to investigate the progress of VPAs in the light of potential capacities and realized capacity-related challenges. In using the content analysis approach, I compiled data on the five VPA countries as review notes, which were used to assess each VPA country's progress in relation to potential capacities and associated challenges. My content analysis of the data included EFI FLEGT updates published and available in English. The validity and reliability of the data collected were strengthened through triangulation of the

results from policy documents, meta-analysis of VPA cases and interaction with focal points to address my main research questions.

Results

In this section, I present the potential and the existing/realized capacity of the VPA process for (a) advancing principles of transparency and participation, as well as implementing functional timber verification systems, and (b) the main challenges of realizing potential capacities. Table 3.2 summarizes the status and progress of the VPA process. I highlight the insights from my interactions with focal persons to support the content analysis.

Table 3.2

Summary of the Status of the VPA Process in Study Countries

Country	Negotiations	Signing by VPA parties	Ratification	FLEGT licensing
Cameroon	Negotiations started in 2009	VPA signed in 2010	VPA ratified in 2011	No FLEGT licensing
CAR	Negotiations started in 2009	VPA signed in 2010	VPA ratified in 2012	No FLEGT licensing
Congo	Negotiations started in 2008	VPA signed in 2010	VPA ratified in 2013	No FLEGT licensing
Ghana	Negotiations started in 2007	VPA signed in 2009	VPA ratified in 2009	No FLEGT licensing but Ghana issued "mock FLEGT licenses" in 2018
Liberia	Negotiations started in 2009	VPA signed in 2011	VPA ratified in 2013	No FLEGT licensing

Source: EU FLEGT Facility: http://www.euflegt.efi.int/where-we-work

Potential and Existing/Realized Capacity of the VPA Process

Table 3.3a presents references to information transparency, stakeholder participation, and TLAS in the texts of the VPAs of Cameroon, CAR, Congo, Ghana, and Liberia at the time of the study. Table 3.3b shows the existing and realized capacity of VPA processes in implementing

mechanisms for information transparency and stakeholder participation, as well as in developing and deploying TLAS in the five VPA countries. None of the VPA countries ranked very high for advancing transparency and participation. However, there have been promising developments in implementing VPA information transparency and participation mechanisms.

Table 3.3aPotential Capacity of VPA Process in Five Study Countries

Capacity aspect	Cameroon	CAR	Congo	Ghana	Liberia
Information transparency	Article 21 and Annex VII include 75 types of data or information in forest sector to be publicly available. Article VII references all important information on the operations associated the FLEGT licensing scheme.	Annex XI includes 68 types of data –13 categories for dissemination. Annex IX, Section IIb references civil society efforts to document information and make it publicly available to the FLEGT licensing authority and the JIC.	Annex X includes 49 types of data – four categories for dissemination. Article 21 references reporting and public disclosure	No annex but in LAS reference to 68 types of data. Art. 20-2: JMRM records efforts toward transparency with reference to specific documents to be made public. Annex under development.	Annex IX includes reference to Freedom of Information Act (2010), Extractive Industries Transparency Initiative – two categories for information disclosure–61 types of data – 7 categories for dissemination. Also described in LAS. Annex II, Principle 11.
Stakeholder participation	Article 16 and Annex III-B lay down commitments to establish participation mechanism to guarantee key stakeholders' involvement in the monitoring and implementation of the VPA. Annex III-B: National Monitoring Committee includes all interested stakeholder, especially CSOs.	Articles 16 and 19 as well as Annexes VIII and IX reference participation mechanisms (e.g., National Committee for Implementation and Monitoring (CNMOS) and Technical Permanent Secretary (STP)).	Article 16 makes commitments to consult and involve key stakeholders in the implementation of the agreement. As set out in article 19, a Joint Implementation Council (JIC) shall be established to facilitate monitoring and review of the agreement.	Article 16 includes the principle of participatory management. It encourages the consultation of stakeholders, including local communities.	Article 16 states the following participation requirements: representation (Article 16-1) and functioning (Article 16-3) of participatory mechanisms.
TLAS	Annex VIII outlines the control of the supply chain to track timber from the forest to the point of export. Article 9 requires the establishment of timber legality verification system Annex II-A details system for verifying the legality and derived wood product.	Annex V references the establishment and management of information software adapted to the traceability requirements needed to control, verify and license legal timber.	Articles 3, 8, and 9 as well as Annex III include requirements to establish systems for verifying that timber and derived products for export have been legally produced and that only timber verified as such is exported to the EU.	Article 8 requires that Ghana develops and implements to differentiate legally-produced from illegally-produced timber along the supply chain. See also L.I. 2254	Article 8 includes commitments to establish a system for verifying timber legality along the supply chain. The legality definition is set out in Article 2 and in Annex II.

Source: see Appendix A

 Table 3.3b

 Existing and Realized Capacity of VPA Process in Five Study Countries

Countries	Good forest governance: Transparency and participation mechanisms in the VPA process		Functional TLAS	Highlight of existing and realized capacity	
	Disclosure of information on VPA-related activities	Existence of functioning participation mechanisms for VPA process	TLAS developments and deployment	-	
Cameroon	Medium realized capacity	Medium realized capacity	Medium existing/realized capacity	Developed a dedicated website for information sharing, but there is still more to do. Established strong participation mechanisms which are active. TLAS (SIGFII) developed but not deployed.	
CAR	Low realized capacity	Low realized capacity	Very low existing/realized capacity	 Developed website to publish information but the functioning of the mechanisms has been limited. Established participation mechanisms but the functioning of the mechanisms has been limited. No TLAS has been established 	
Congo	Medium realized capacity	Medium realized capacity	High realized capacity	 Developed a website and publishes information on the website. Established participation mechanisms as outlined in the VPA but does not function as intended. TLAS developed and preparing for deployment. 	
Ghana	High realized capacity	Medium realized capacity	High realized capacity	 Developed a public portal for sharing information Established stakeholder participation mechanisms, and they are working. TLAS (GhLAS) developed, piloted/tested but not fully functional nationwide. 	
Liberia	Medium realized capacity	Medium realized capacity	High realized capacity	 Publish forest-related information on FDA's website Developed mechanisms to engage forest sector stakeholders TLAS (LiberTrace) developed and tested but not fully functional nationwide. 	

Source: Author.

Information Transparency

My analysis revealed that there is high potential capacity for the establishment of mechanisms that make information available to all relevant stakeholders. All five VPAs include basic and general transparency measures, outlined in the VPA texts and annexes, listing the information to disclose to the public (Table 3.3a). This ranges from 49 (Congo) to 74

(Cameroon) types of data. In all countries studied, the dissemination of forest-related information is often carried out through portals, websites of national forestry authorities, official reports, and multi-stakeholder implementation platforms.

The realized capacity for sustaining information transparency efforts varies across the countries. The existing and realized capacity of Cameroon, Congo, and Liberia was ranked medium (see Table 3.3b). Cameroon developed a website (www.apvcameroun) dedicated to publishing forest-related information and documents included in the EU–Cameroon VPA. In 2017, the website provided over 80% of the information that should be publicly available (NYDF, 2018). However, the website is now (2019) offline, and in 2018, the information made available via the website was either incomplete or lacked consistency. Hence, state and non-state actors continue to rely on informal channels to access information. In Congo, the Ministry of Forestry publishes financial and other forest-related information, as foreseen in Annex X, on a website (apvflegtcongo.info). The website is often offline and often lacks content or suffers from periodic technical problems (Forest Watch Report, 2018). Congolese CSOs welcomed the adoption of Congo's transparency code in 2017, which enables them to request specific pieces of information on an ad hoc basis to support their monitoring (Forest Watch Report, 2017).

As set out in transparency annex IX, my analysis reveals that Liberia has a medium realized capacity. Liberia adopted the 2010 Freedom of Information Act and since 2017 it has been publishing reports with information on taxes collected, production, and market prices on the Forestry Development Authority's (FDA) website (http://www.fda.gov.lr/; Minang et al., 2017). However, the functioning of the website suffers from technical issues and lacks regular updates. Moreover, the format of the information provided on the website does not suit the needs of information users. The FDA also integrated timber in the Extractive Industries Transparency

Initiative and provides broad access to forestry information throughout the production value chain (Bollen & Ozinga, 2013).

Ghana, on the other hand, has a high existing/realized capacity for ensuring transparency in accordance with Article 20. The Forestry Commission of Ghana, in collaboration with civil society, developed the Transparency Portal to provide the public with access to information about, for example, harvest rights, timber rights fees, harvest-related payments, and Social Responsibility Agreements (personal communication with a civil society representative, July 30, 2019; Accra, Ghana). Finally, although CAR developed a centralized database on forests and a website (www.apvrca.org), the functioning of the website has been limited due to weak capacities for forest monitoring and control, and a lack of capacity and resources (ITTO, 2018). Hence, CAR was ranked as having low existing/realized capacity to implement the information transparency commitment of the VPA process.

Stakeholder Participation

My analysis ranked CAR as having a very low realized capacity to engage multi-stakeholders in the VPA process, and Cameroon, Congo, Ghana, and Liberia as having a medium existing capacity for applying participation mechanisms in the VPAs. Cameroon established the Joint Monitoring Committee (JMC or *Comité conjoint de suivi*, in French), a Joint Implementation Committee (JIC), and a civil society platform. However, these mechanisms (e.g., National Monitoring Committee) are behind schedule or suffer from internal representation problems. Similarly, as defined in Article 16 and Annex V of the EU–Ghana VPA, Ghana established Joint Monitoring and Review Mechanisms (JMRM) and a Multi-Stakeholder Implementation Committee (M-SIC), including actions to support a civil society platform to ensure the engagement of stakeholders in the VPA process. However, the M-SIC has become

less effective as a deliberative mechanism. Liberia also developed a JIC and a National Multi-stakeholder Monitoring Committee (NMSMC). In realizing the potential capacity of the VPA process, Liberia is the only VPA country to have community representatives on the multi-stakeholder committee overseeing the implementation (Satyal, 2018). The functioning of the mechanisms, however, has been limited by the change of leadership within the forest authority.

On the other hand, as per Article 15 and Annex IX (5) of the VPA text, Congo set up a Joint Implementation Committee (CCM) and a Technical Secretariat (ST). However, the ST has not been actively applying the Joint Implementation Committee to engage stakeholders in Congo's VPA process. However, CSOs formed a platform to engage in the VPA process. As in other VPA processes, the engagement of private sector actors in the VPA process remains a concern. Finally, CAR established participation mechanisms such as a JIC, National Committee for Implementation and Monitoring (CNMOS), and a Technical Permanent Secretary (STP) to ensure the involvement of various stakeholders in the implementation of the VPA process.

Moreover, CSOs continue to engage in the VPA process through the GDRNE (Gestion Durable des Ressources Naturelles et de l'Environnement) platform, in which a large number of Central African NGOs active in the forest sector participate. However, the functioning of these participation mechanisms remains limited due to political instability and a lack of human and financial capacities (Brack & Léger, 2013; Minang et al., 2017).

Overall, the VPA process has contributed significantly to the development of multi-stakeholder structures and improved the participation of state and non-state forest sector stakeholders in all VPA countries, and therefore enabled constructive continuous stakeholder consultation in the VPA process.

Timber Legality Assurance System (TLAS)

Here, I describe the existing realized capacity of the VPA process to design national TLASs and to perform wood tracking, as well as to set up institutional structures and procedures, such as developing verification protocols and approaches. Table 3.3b summarizes the realized capacity of the VPA process to develop and implement a functioning TLAS to ensure that timber and timber products comply with the VPA regulatory requirements. None of the VPA processes studied was ranked as having a very high realized capacity for developing and deploying TLAS. Ghana and Liberia were ranked as having a high realized capacity because the Forestry Commission of Ghana developed, tested, and is now close to implementing a Ghanaian legality assurance system (GhLAS) nationwide (ITTO, 2018). However, the GhLAS does not contain all the datasets and can only be operational when the revised version of the system is taken up nationwide (personal communication, August 21, 2019; Accra-Ghana). The main problem of the TLAS in Ghana is related to the capacity of the existing system to distinguish between timber originating from forest sources recognized by the VPA and other sources of timber without recognized timber rights.

In 2015, Liberia developed and implemented a TLAS (LiberTrace, https://libertrace.sgs.com/). However, the computerized LiberTrace is not yet fully operational nationwide, leading to the issuance of FLEGT licenses. This is because of the need to revise the legality matrix to integrate community forestry, chainsaw harvest operations, and other legal reforms identified during the process of defining legality. Moreover, the nationwide operationalization of LiberTrace has been limited by a lack of realized capacity and the difficulty of harmonizing the different components of the verification systems and validating the data in the systems (EC, 2016).

The VPA processes of Cameroon and Congo were ranked as having a medium realized capacity. The Cameroon VPA process developed a computerized Forest Information

Management System (SIGIF, in French) to address both legality and traceability verification.

Although most TLAS work has been completed, problems related to SIGIF, delays in the revision of legal frameworks, and law enforcement hinder the implementation of SIGIF.

In 2015, Congo developed a TLAS (*Système Informatisé de Vérification de la Légalité* (SIVL)—Computerized System of Legality Verification, in English) and is currently (December 2019) preparing to deploy it. Capacity building to operate SIVL has started for forestry officials, the private sector, and civil society. Finally, TLAS is still under development, and the VPA process in CAR was ranked as having a very low realized capacity.

Key Challenges to VPA Process Implementation

Table 3.4 presents main challenges hindering the full realization of the VPA process to ensure good governance and implement a functioning wood tracking system. I present both challenges common to all VPAs and country-specific challenges (Table 3.4).

Table 3.4

Summary of Challenges to Ensuring Good Forest Governance and TLAS in five VPA Countries

Countries	Key challenges
Cameroon	Political culture, weak legal frameworks, poor alignment of institutional boundaries and lack of institutional acknowledgement, state officials deliberate failure to collect and maintain information, insufficient capacities of authorities, and limited resources to enforce rules.
CAR	Lack of staff and logistics, civil war, lack of or weak coordination in formal state policies, weak and overlapping legal frameworks and political culture.
Congo	Lack of human resources and logistics, high level of corruption, weak and overlapping legal frameworks, state officials deliberate failure to collect and maintain information.
Ghana	Political culture, inadequate and unrealistic laws, non-compliance/poor enforcement, prolonged and bureaucratic process, and ignorance and lack of information.

Liberia

Lack of human resources and logistics, poor commitments of officials to uphold the rule of law, weak and inconsistent legal framework, poor transparency and accountability, lack of forest information.

Source: Pepke et al. (2016)

Challenges common to the VPAs

The common important challenges across the VPA countries include political culture, weak and inconsistent legal framework, legitimacy factors, inadequate law enforcement, inadequate human and financial resources, and a lack of a fully functional data management system (Table 3.4). First, the constraints on realized capacity embedded in the political culture of Cameroon, Congo, Ghana, and Liberia have stalled VPA progress to date. This political culture in the forestry sector relates to the abuse of authority by powerful elites and corrupt practices by government officials (Pepke et al., 2016). Second, in a fragmented governance regime, weak and inconsistent legal framework (e.g., conflicts between formal and informal customary laws related to tree tenure) and poor coordination among different sectors and agencies of government are still a challenge. Moreover, coordination among different programs with potential synergies is often absent at the implementation level, because of the vested interests of forestry bureaucrats and the lack of resources for coordination (Tegegne, Cramm, & Brusselen, 2018). Third, forest information is poorly disseminated between levels of government because of low political will to collect and manage information about TLAS, poor documentation, and a lack of strict adherence to the reporting guidelines set out in the VPAs.

Fourth, despite the progress made in establishing legal, policy, and institutional frameworks in all five VPA countries, effective compliance monitoring is still limited because of insufficient capacity for law enforcement and weak coordination among national law enforcement agencies. A lack of ownership of government policies to tackle illegal logging

limits effective compliance in the VPA countries (NYDF, 2018). Fifth, the VPA countries lack the financial, human, and material resources needed to comprehensively deal with the complexity of legality within the forestry sector. The lack of financial resources in the five countries, however, results from a combination of overdependence on external funding from international donors and internal budgetary constraints (Eba'a Atyi, 2018; EC, 2016). Sixth, and last, compounding this problem of incomplete centralized databases is the fact that the VPA countries have unreliable power supplies and internet connectivity, which prevents far-reaching success regarding the piloting of wood tracking systems and undermines progress (see also Gyimah, 2012). These barriers have serious implications for the provision of real-time information, data analysis, and decision-making, as well as for reconciliation with consolidated figures along the timber supply chain.

Country-Specific Challenges

As shown in Table 3.4, there is a plethora of country-specific challenges (Pepke et al., 2016). The country-specific challenges are presented below:

- In Cameroon, the key challenges include the vested interests of political and economic elites enabled by poor transparency, a lack of cross-sectorial communication, inconsistent forestry regulations, and uncoordinated formal national policies (Carodenuto, 2019; Carodenuto & Ramcilovic-Suominen, 2014; Cerutti et al., 2013; Korhonen-Kurki et al., 2016; Tegegne et al., 2017).
- In CAR, political and military crises pose additional barriers to the implementation of VPA requirements. The effects of the political crisis combined with other domestic problems have intermittently led to the suspension of the VPA process, which has slowed the pace of implementation (Brack & Léger, 2013). Other key challenges in CAR include

- weak and overlapping legal frameworks, corruption, structural difficulties, and inadequate funding for the judiciary and other public institutions (Cerutti et al., 2013).
- In Congo, the main challenges include the culture of corruption, weak and overlapping legal frameworks, poor transparency and accountability, and inadequate human resources for monitoring compliance (Cerutti et al., 2013; Lescuyer et al., 2011).
- Ghana faces five major challenges: its political culture, inadequate legal frameworks (even though the laws have been reviewed and consolidated, they do not have implementation decrees), weak monitoring structure for detecting and sanctioning non-compliance, bureaucracy, and a lack of forest information about, for example, forest taxation (Ameyaw et al., 2016; Minang et al., 2017). In Ghana, my discussions with focal persons confirmed the recent second independent joint evaluation of Ghana's TLAS, namely that non-compliances related to the conversion of leases and non-existing forest management plans for productive forest reserves have been persistent (personal communication, July 23, 2019, Accra-Ghana). This evaluation report further revealed that harvesting operations are currently ongoing in forest reserves without valid forest management plans. In most of these cases of non-compliance, the forest management plan had expired.
- In Liberia's forest sector, the three key issues associated with the political culture are poor transparency and accountability, a lack of institutional commitments to enforce forestry laws, and inconsistent legal frameworks (Pepke et al., 2016).

Discussion and Emerging Issues

Here, I distinguish and analyze the capacity trends and dynamics of FLEGT with respect to *governance capacity aspects* versus *TLAS capacity aspects*, looking at not only indicator-led

approach and accomplishments, but also challenges to VPA countries' performance during the implementation phase.

Although Congo, Liberia, and Ghana have made good progress regarding governance capacity aspects, the situation is much less satisfactory in Cameroon and CAR. The progress made in exercising these principles and addressing the governance challenges lags behind the policy statements due to disengagements with the crucial and long-standing conflict issues (Forest Watch, 2018), a lack of capacities, and over-reliance on donor support (Hansen et al., 2018, Obidzinski et al., 2014; Wodschow et al., 2016). In Congo and the CAR, good forest governance aspects have not been brought up in the policy discourses. There is therefore a need to work on this aspect not only when it comes to the actual implementation, but also to satisfy the good forest governance requirements of the VPA process.

In general, there is a lack of realized capacity for transparency and limited attention is paid to VPA process in the five countries. Concerning transparency measures, unlike in Liberia, access to information in Ghana is limited to timber statistics and does not include revenue and trade flows. In CAR, governance and law enforcement are lacking—a result of civil war (Brack & Léger, 2013, Forest Watch Report, 2018). A lack of information transparency is likely to result in widespread corruption, which in turn undermines the effective implementation of transparency measures (Bollen & Ozinga, 2013; Minang et al., 2017). What is needed are clearly defined roles for key actors, which would allow partners to avoid any conflicting expectations and positions. Essentially, there is a need to further clarify roles and actions to enforce existing legislation on freedom of information in the VPA countries such as Ghana, Congo, and Liberia, which may empower non-state actors to demand greater transparency concerning the forest sector's processes and operations. Although the constitution makes some provisions for access to

information in Cameroon and CAR, a specific VPA legislative framework to support access to forest-related information in these countries might be helpful.

The quality and extent of stakeholder participation is regarded as an important indicator of institutional capacity (Wickham et al., 2009). My observations indicate that Ghana, Liberia, Cameroon, and Congo have involved different group of stakeholders in the VPA process, and especially in the negotiation phase. This resonates with similar findings in Ghana (Beeko & Arts, 2010), Cameroon (Wodschow et al., 2016), Congo (Tegegne, 2016), and Liberia (Satyal, 2018). Yet, I highlight that this literature discusses either participation during the very early stage of VPA negotiation (e.g., Beeko & Arts 2010), or participation by the traditional state actors (Overdevest & Zeitlin, 2018). FERN (2019), for instance, highlight that there is still limited awareness among and direct involvement of local and indigenous communities in the negotiation and implementation of the VPAs. Recently studies focusing on stakeholders' participation in the VPA process paint a more complex picture concerning civil society involvement and especially local representation (Brusselaers & Buysee 2018; Hansen et al., 2018, Hirons et al., 2018; Satyal, 2018; Obidzinski et al., 2014; Wodschow et al., 2016).

Efforts to formalize timber production under the VPA in the VPA countries entail the risk of marginalizing or excluding less powerful actors, such as local communities' domestic timber operators and traders (Brusselaers & Buysee 2018; Hirons et al., 2018). I acknowledge that participation by different stakeholders in the VPA process is gaining attention in institutional arrangements, such as JMRM meetings. Yet those meetings and institutional settings are often little more than a formality and they lack political power to move VPA implementation forward, resulting in frequent adjustments of the timeframe. Stakeholder participation is, however, still lacking, often due to a lack of political will. This challenge also relates to asymmetries in VPAs'

planning, quality, and access to forest information, with engagement and information sharing limited to political and economic elites in the forestry sector. For instance, I found that the existing participation mechanisms (e.g., JIC, M-SIC) not only tend to be technocratic, but also remain high-level national affairs without the direct involvement of downward constituents.

Since the VPA process is technical in nature and dependent on political and cultural contexts, VPA countries need to engage in case-to-case based challenges, instead of pursuing blueprint models of and schemes for capacity building for active stakeholder participation including civil society organizations (CSOs). This approach has in many cases—such as in countries with strong authoritarian regimes—meant that the CSOs are brought in and trained by the VPA policymakers, resulting in little critical assessment and few demands for accountability. Thus, to achieve better participation in the VPA countries requires new strategies (to develop and model genuinely participatory approaches to local policymaking) and 'down-scaling,' giving due attention to the local issues of interest and local actors' voices. Because it is also questioned whether CSOs are adequate representatives of the local communities (Satyal, 2018), novel participation schemes—such as direct platforms for local communities emerging from below —are needed if the VPA process is to claim and indeed achieve inclusivity, participation, and equity. As suggested by Brusselaers and Buysee (2018), governance performance through the application of principles of good governance via VPA is far from being transformative in the VPA countries. I believe that good governance principles are mere policy statements in the VPA documents or incremental instances of participation in terms of JIC or JMRM meetings and remain difficult to translate on the ground. Once effectively operational, the VPAs are expected to improve the countries' capacities for "good forest governance" considerations, which in turn will improve their governments' commitments to accountable and inclusive forest governance.

However, this ultimate goal remains a long way off, and most of the VPA countries have little chance of reaching it.

For the TLAS, none of the VPA countries has met its original timeline for issuing FLEGT licenses because of challenges ranging from institutional issues, such as bureaucracy and corruption, to more complex infrastructural issues, including the lack of a functional centralized database on timber management and systems tailored to country-specific needs. As also reported by Hudson and Paul (2011), the FLEGT Action Plan seems to focus more on the capacity development of the VPA countries than on the technical aspects. My analysis shows that the progress achieved so far in Cameroon, Congo, Liberia, and CAR is still insufficient to permit the effective functioning of the TLAS in the near future. This is because of a lack of political will, a lack of human or financial resources, a lack of infrastructure, and deliberate delay in the legal reforms after the ratification of the VPAs. As noted by Eba'a Atyi (2018), forestry and related legislative authorities in Africa have difficulty enacting relevant forestry laws and regulations. As a consequence, important administrative decisions required to facilitate implementation process cannot be taken. For instance, most actors—including forest administrators—in VPA countries have difficulty interpreting and understanding the forestry regulations of their own countries, as noted by Assembe-Mvondo (2008). This finding suggests the need for capacity building efforts. Such efforts may support the broader transparency and participation agendas of FLEGT, REDD+, and the NYDF.

Reflecting on the discussion so far, it is clear that the progress in the implementation of information transparency and stakeholder participation mechanisms, as well as TLAS, points to the complexity of the governance contexts as well as a lack of institutional capacity to address outstanding governance issues (e.g., incentives for operators in the informal sector, political

culture and will, inconsistency of regulatory frameworks, unclear tenure rights) in developing countries (Minang et al., 2017). As such, if the net effect of the VPA process is to ensure that timber and timber products on the domestic market in a VPA country, or imported into the EU from a VPA country, comply with laws of that country, then the complexity of socioeconomic and cultural dynamics—which are often afterthoughts in the context of developing countries—requires special attention from the FLEGT policymakers and the implementers. This is important, because the FLEGT–VPA mechanisms are perceived to be "generally conceived prior to, and independent of, their application in particular domestic settings, often making them ill-suited to the unique circumstances of the forest sectors in which they operate" (Carodenuto & Cashore, 2018, p. 1). These perceptions include the claim that the timber legality issue in the current situation is overly burdensome, externally crafted (rather than techniques and practices of governments in VPA countries), and imposed on developing countries without considering local realities (Acheampong & Maryudi, 2020).

While systematic research is needed to understand how systemic or institutionalized bureaucracy, politico-socioeconomic dynamics, and historical contexts all influence the VPA process and outcomes, implementers can start addressing these barriers by improving the incentives currently being offered under timber legality verification and enhancing society's understanding of legal and sustainable supply chains in developing countries. At a minimum, these changes in practice and the emerging issues are considered critical to the effective implementation of VPAs leading to FLEGT licensing. I suggest, however, that overcoming the challenges of forest governance involves considering not just the complex socioeconomic and political dynamics or the nature of VPA implementation, but also the non-human elements of the

processes of policy change, such as the technological substance of monitoring global green supply chains.

The complex mix of legality verification technologies (e.g., TLAS, remote sensing, and forensic methods) introduced into the governance systems in the global South, present opportunities for policy learning that focuses on how targeted interventions might reshape climate change governance. I see this as an underexplored research area that could provide insight into how strategies of contemporary green supply chains are pursued and reshaped through the theoretical lenses of governmentality technological studies. This future research should include the institutional capacity—technology interrelations in the forest sector that seem to be affected by socioeconomic contexts, institutional factors, and infrastructure problems in developing countries.

Conclusion

An assessment of institutional capacity in isolation from contextual factors such as sociopolitical, economic, and historical trajectories is likely to provide a false sense of existing and
realized capacity for advancing the principles of good forest governance and ensuring legality in
the forestry sector. The research underlying this article assessed, through a desk study, a
meta-analysis of cases, and communication with country VPA focal points, the institutional
capacities of the VPA process for advancing information transparency and multi-stakeholder
participation, as well as for developing and implementing TLAS in Cameroon, the Central
African Republic (CAR), the Republic of the Congo (Congo), Ghana, and Liberia. My findings
show that the VPA process has potential capacities for advancing progress on good forest
governance and TLAS. Important progress is, however, constrained by complex political and
technical issues. In Cameroon and the CAR, the realized capacities of VPAs are limited, whereas

in Ghana, Liberia, and Congo, both progress and realized capacities are more pronounced. While there are prospects for making progress in these countries, challenges are posed by such factors as weak and inconsistent legal frameworks, insufficient financial resources, and long-term conflicts, all of which have slowed down the implementation of VPAs. Furthermore, the VPA progress in these countries is impaired by the dependence on external funding sources, as well as the lack of greater efforts and genuine commitment by the VPA countries to advance principles of "good forest governance" and TLAS.

Despite different contexts and stages of implementation, there are still important areas for improvement within the current practice. In each country, efforts to strengthen transparency and accountability should include addressing unequal participation in the VPA process, providing incentives to encourage inclusive participation, and making information accessible and available to all stakeholders, especially the local communities. Modest investment in regional capacity sharing and peer-to-peer policy learning between different countries could have a significant effect on their realized capacities. More importantly, the exchange of knowledge via capacity platforms would advance the cause of domestic resource mobilization (i.e., progressive timber taxation and collaboration with the local financial sectors to lay the groundwork for domestic funding). Regarding the political instability, international and national institutions in VPA countries should leverage the expertise and resources of the FLEGT VPA in their conflict resolution architectures and initiatives.

My methodological limitations relate to the study's small sample size (n=5) to complement a desk-based review of institutional capacity in five VPA countries. The small sample does not allow the generalization of my conclusions. Rather, the study provides case-and context-specific insights in pursuit of improved opportunities for institutional learning between

VPA countries. The distribution of my study sample was highly uneven with focal points mainly from Ghana, Cameroon, and Liberia. This has to be considered when generalizing the findings of the study and points to a key challenge of comparative forest governance research. In lieu of further research, I recommend a more attentive assessment of the capacity needs and gaps of FLEGT based on detailed country case study analysis using a mixed methods approach. Special attention must be paid to large sample size to substantiate my findings concerning institutional capacity of VPA process in CAR and Congo specifically and Africa in general.

Chapter 4: Good Governance Practices in Ghana's Voluntary Partnership Agreements **Process: An Application of Q Methodology**

Abstract

The aim of the European Union Forest Law Enforcement, Governance, and Trade Action Plan and its Voluntary Partnership Agreements (VPAs) is to tackle illegal logging and trade in illegal timber, improve forest governance, and foster economic growth in the forest sector. This study

employed a Q methodology to assess areas of consensus and disagreement among forest sector

stakeholders in Ghana on good forest governance practices as applied to the VPA process. The

consensus among these stakeholders is that the VPA process has improved the participation of

civil society in decision making and the establishment of a robust verification system to promote

transparency and accountability, which are critical for sustainable forest management. However,

while the shared perspectives among stakeholders highlight the crucial role of the VPAs in

promoting improved forest governance in Ghana, there are still areas of disagreement or tension

regarding the issue of accountability, tree tenure, and the participation of local communities in

the VPA process. The paper concludes by considering the practical implications of the findings

for effective forest governance practices in developing countries.

Keywords: Ghana, Good forest governance, Tree tenure, Q methodology, Impact

Introduction

In response to global concerns about illegal forest practices and trade in illegal timber, the European Union (EU) launched the Action Plan on Forest Law Enforcement, Governance, and Trade (FLEGT) 2003 to tackle illegal logging and related trade (European Commission—EC, 2003a). The FLEGT Action Plan includes both demand- and supply-side measures. The demand side prompted the promulgation of legislation, for instance, the 2013 EU Timber Regulation requiring EU timber importers to apply due diligence procedures to ensure the legal trade in timber and timber products (EU FLEGT Facility, 2020a). A key supply-side measure of the Action Plan⁸ is a Voluntary Partnership Agreement (VPA), which is a legally binding trade agreement between a partner country and the EU (EU FLEGT Facility, 2020a). Central to a VPA is the Timber Legality Assurance System (TLAS), which must be developed and implemented to ensure the legal production of timber in the partner country and to prevent timber from illegal sources entering the supply chain (EU FLEGT Facility, 2018b). A FLEGT license issued by a partner country is required for each EU-destined shipment of timber products covered by a VPA.

Fifteen tropical countries are currently (May 2020) at various stages of VPA processes (EU FLEGT Facility, 2020b). Only Indonesia has begun issuing FLEGT licenses to verified legal timber products exported to the EU. Cameroon, Ghana, Republic of the Congo, Honduras, Central African Republic, Liberia, and Vietnam are currently implementing VPAs. Côte d'Ivoire, Democratic Republic of the Congo, Gabon, Guyana, Laos, Malaysia, and Thailand are negotiating VPAs with the EU.

Scholars have reported mixed results on the potential and actual contributions of the VPA process to forest governance (Hansen et al., 2018; Overdevest & Zeltin, 2018; Tegegne, Cramm,

⁸ While the FLEGT Action Plan sets out seven measures to tackle illegal logging and trade (see http://www.euflegt.efi.int/es/flegt-action-plan), we focus on the one measure (VPAs) that mostly represents the capacity of VPA countries to improve good forest governance.

& Brusselen, 2018). For instance, Overdevest and Zeltin (2018) and Cerutti et al. (2020) reported positive contributions of the VPA process to the functioning of multi-stakeholder structures, the revision of forest laws and regulations, and transparency in the forest sectors of Cameroon, Ghana, and Indonesia. Other independent reports concluded that the VPA processes have improved governance structures in the forest sector through the reinforcement of public institutions, public participation, policy reforms, and forest law enforcement in partner countries (EC, 2016).

In contrast, other studies have been critical of VPAs (see Ansah, 2013; Hansen et al., 2018; Hirons et al., 2018), suggesting that while there are associated pockets of mixed 'good forest governance' practices, there remain a number of cases of business-as-usual in the partner countries. Ansah (2013), for instance, argued that VPA in Ghana risks reinforcing the status quo, due to the disconnection between VPA policy content and practice. Likewise, Hansen et al. (2018, p. 75) remarked that: "VPA implementation in Ghana serves to stabilize and reproduce the very forest governance regime that it set out to reform—a process that is much less 'experimental,' and much more business as usual." They showed that the implementation of the VPA process has not had the desired outcome in Ghana.

Given the important role that stakeholders can play in the implementation of the VPAs, and the fact that VPA implementation needs to be based on strong empirical evidence, there is a need to better understand the extent to which 'good forest governance principles' from stakeholder perspectives can best be translated into effective practices that address environmental problems and improve forest conservation and management outcomes (Kanowski et al., 2011). Satyal (2018) has argued that, unfortunately, good forest governance practices as applied to the VPA at the country level are still not well understood because several outstanding

governance issues remain under-researched, disputed, or highly contested. For example, little is known about the way in which the key stakeholders experience good forest governance at the local and national levels in Ghana (Hansen et al., 2018). Hence, the strengthening of the connections between scholarly and stakeholder debate could be useful in terms of connecting political analysis with democratic spaces (Stevenson, 2015). Against this background, the objectives of the present research were to:

- Explore the areas of consensus and disagreement among forest sector stakeholders in Ghana on good forest governance practices as applied to the VPA process.
- 2. Consider the practical implications of my findings for addressing governance challenges in the forest sector.

Identifying areas of consensus and disagreement about VPA-related good governance practices among stakeholders allowed me to specify not only the strengths of the policy but also areas requiring reforms to ensure better outcomes for forest governance in Ghana.

The remainder of this paper is structured as follows. Section 2 provides the theoretical approach to the study. Section 3 describes Q methodology and the data collection process.

Section 4 presents the results. Section 5 discusses the results and the emerging issues. Section 6 concludes the paper with some implications for future research.

Conceptual Framework

A great deal of effort has been devoted to identifying mechanisms that will improve 'good practices' in forest conservation and management (Kanowski et al., 2011). These efforts have been formally defined as good forest governance practices, and they include "respect for the rule of law in forest activities, transparent resource management, participatory rights in decision-making, equitable and secure land tenure, the control of corruption in the forest sector,

and [local-level] use and management of forest resources" (New York Declaration on Forests—hereinafter NYDF, 2019, p. 11). However, the concept of good forest governance remains contested and there is disagreement about its practical application especially as it relates to the issues of voice and accountability (Gisselquis, 2012; Kaufmann et al., 2010). Others have also suggested that the good forest governance criteria are a poor guide for the development and implementation of policies (Grindle, 2004), because they are ad hoc, perception-based or unrealistic, and ahistorical (Booth, 2011). As such, the criteria for assessing good governance are strongly resisted, as they are perceived to be developed and advocated by global elites (Gisselquis, 2012).

Despite these widespread criticisms, scholars have deployed the concept within the forest sector to describe the quality of forest governance processes and outcomes based on a number of criteria (Ameyaw et al., 2016; Secco et al., 2014). Two of the notable frameworks and criteria are those of the Program on Forests/United Nations Food and Agriculture Organization (PROFOR/FAO, 2011) and the World Resources Institute Governance of Forest Initiative Indicator Framework⁹ (Davis et al., 2013).

Based on the PROFOR/FAO framework, I stick to the six key principles of good governance: (a) accountability, (b) effectiveness, (c) efficiency, (d) fairness and equity, (e) participation, and (f) transparency (see Table 4.1 for details). The six key principles of good governance interconnect with three core pillars of forest governance:

- 1. Policy, legal, institutional, and regulatory frameworks;
- 2. Planning and decision-making processes; and

⁹ The World Research Institute Governance of Forest Initiative Indicator Framework outlines five principles of good governance (transparency, participation, accountability, coordination, and capacity) that provide the benchmark of quality against which to assess three key components (actors, rules, and practice) of forest governance.

3. Implementation, enforcement, and compliance.

The main aim of the pillars of forest governance is to address the barriers to forest governance, such as a lack of transparency, accountability, and participation (Larson & Petkova, 2011). In this paper, the policy, legal, and institutional regulatory frameworks concern the overarching VPA policy content and the nature of the implementation plan. The second pillar concerning planning and decision-making process focuses on how VPA policy actors converge around VPA process to negotiate, plan, and make important decisions. The pillar regarding implementation, enforcement, and compliance is related to how VPA policies and plans are translated into concrete operational programs on the ground.

Table 4.1Principles of Good Forest Governance

Principle	Description
Accountability	Accountability exists when institutional responsibility is clear and there is an
	oversight of actions taken by decision makers, so as to guarantee that
	policymakers take stakeholders' views into account (PROFOR/FAO, 2011).
Effectiveness	Effectiveness connotes outcomes of VPA arrangements at a country-level,
	that are case and context specific. This implies that the mechanisms of forest
	governance should produce outcomes that are consistent with the rationale
	and assumptions that underpinned the VPA (PROFOR/FAO, 2011).
Efficiency	Efficiency relates to how governance actors should work with a minimum of
	waste of resources (forest stock and human and financial resources). To
	increase efficiency, improved cross-sectorial coordination is needed, as is

capacity in terms of the financial, human, technological, legal, and institutional resources required to perform a function (Davis et al., 2013).

Fairness/equity

This principle concerns the recognition of the access and tenure rights of local communities; Social Responsibility Agreements¹⁰; benefit-sharing mechanisms; the meaningful participation of all groups of stakeholders; and the presence of dispute-resolution mechanisms (Bollen & Ozinga, 2013).

Participation

Participation relates to how all interested and affected stakeholders should have an opportunity to be heard or to influence VPA decisions that affect the forest either directly or through legitimate intermediaries representing their interests. That is, having a deliberative process in place (PROFOR/FAO, 2011).

Transparency

Transparency is crucial to good forest governance in that it facilitates access to information and enables accountable, inclusive, legitimate, and democratic practices around forests (NYDF, 2018).

Sources: Bollen & Ozinga (2013), Davis et al. (2013), PROFOR/FAO (2011)

The PROFOR/FAO framework was employed to guide my research for three reasons. First, it provides comprehensive and actionable principles linked to the specific and well-defined pillars of forest governance; that is, it specifies a clear analytical construct for disaggregating and identifying specific principles to measure on the ground. It also allows an assessor to evaluate the quality of forest governance at each stage, including planning, implementation, enforcement, and compliance (Gritten et al., 2018).

¹⁰ Social Responsibility Agreements (SRAs) with local communities is a legal requirement between local communities and logging companies, and a precondition for the grant of timber utilization rights. This is approximately the value of 5% of the stumpage fee.

Second, the PROFOR/FAO framework takes seriously the issue of legality in a country's forest sector and understands forest governance in the context of a wide range of diverse actors with competing and conflicting claims over forests. It has therefore been central to good forest governance assessment in some recent studies (PROFOR/FAO, 2011). For example, scholars have applied the framework to assess the forest governance context in Indonesia (Situmorang et al., 2012), Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, and Ukraine (Michel, 2016), and Cambodia, Laos, Myanmar, Thailand, and Vietnam (Gritten et al., 2018).

Third, my methodological approach fit well with the PROFOR/FAO framework, because it allowed for the analyses of subjectivity in a structured and statistically interpretable way (Curry et al., 2013).

Study Area and Methodology

Study Area

This case study area was carried out in the high forest zone (HFZ) in the southern part of Ghana (see Figure 4.1). The HFZ covers a third (8.5 million hectares) of the forest land area and includes forest reserve, wildlife parks, and off-reserve areas (FAO, 2016). Approximately 1.76 million hectares (21% of HFZ) are state forest reserve lands. Of this protected area, nearly 715,000 hectares have been designated industrial timber production areas (FAO, 2016). Logging operations take place in these areas as well as in 6.6 million hectares of outside forest reserves under the supervision of the Forestry Commission of Ghana (FAO, 2016). The remaining area is under strict protection and forest plantations according to defined forest management plans with support from the government of Ghana and the international community (FAO, 2016).

I selected the HFZ as my study area because of the rich timber resources where most of the stakeholders in the Ghanaian forestry sector are actively and directly involved in forest

management and VPA implementation activities (Carlsen, 2013; Oduro et al., 2014). There are considerable variations in ecological conditions and political administrations across the HFZ (Gelens et al., 2010). Important forms of ecological variation exist within nine regions (Western, Western–North, Ahafo, Brong Ahanfo, Bono East, Ashanti, Central, Eastern, and Greater Accra) and political districts that cut across the HFZ. Bono East and Ahanfo regions, for example, experience somewhat humid tropical rainforest climate with an annual rainfall of between 1250 to 1750 mm in the northwest or southwest parts of the region, and drier humid conditions in the northeastern part of the region (Gelens et al., 2010). However, many political regions and districts do not correspond to a single ecological zone, instead encompassing one or more ecological zones. This ecological boundary defines the spatial boundary for assessing FLEGT-VPA in Ghana, but the implementation of VPAs and regulatory authority is typically not restricted by forest ecological zones.

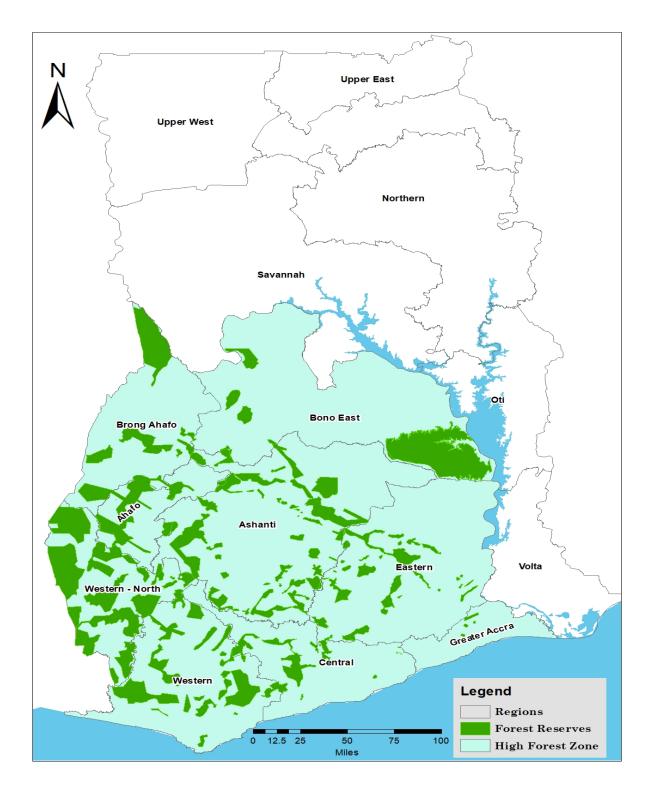


Figure 4.1. Map showing the High Forest Zone of Ghana. (Source: Author, Map produced using ArcGIS 10.6 suite package and datasets from http://diva-gis.org/).

Q Methodology

A Q methodology is a hands-on, systematic, and rigorous scientific tool designed to reveal subjective perspectives and to provide wide-ranging insights into contentious issues (Stevenson, 2015; Tuokuu et al., 2019). To explore areas of consensus and disagreement in stakeholder perspectives on the extent to which the VPA process in Ghana has promoted good governance in the forestry sector, I applied a Q methodology. The Q methodology was originally developed by William Stephenson in 1935 (Stephenson, 1935). The main strength of Q methodology is that it allows for the identification of how individuals think about an issue by revealing patterns within and across individuals, rather than traditional traits or categories (Barry & Proops, 1999). Therefore, Steelman and Maguire (1999) argued that the development of effective environmental and sustainable development policy would benefit from making greater use of Q methodology, as it would allow for better problem identification and definition, and the estimation and specification of policy. In forest governance circles, Q methodology has been used to investigate public perspectives on forest-related climate change mitigation strategies in Europe (Nijnik, 2005) and to determine preferred forest management directions (Steelman & Maguire, 1999). It has also been used to understand stakeholder perspectives of interagency collaboration in the Greater Yellowstone Ecosystem (Epstein et al., 2018). Others like Langston et al. (2019), Živojinović and Wolfslehner (2015), Kaufmann (2012), and Rodríguez-Piñeros et al. (2011) have also applied Q methodology in forestry-related studies.

My motivations for understanding stakeholder perspectives on good forest governance were threefold. First, a Q method addresses the gap between quantitative and qualitative data by providing more systematic and valuable insights into the beliefs of different stakeholders in forest management (Steelman & Maguire, 1999). Second, weak forest governance in developing

countries remains a concern, because knowledge of how to best translate the principles of good governance to improve practices on the ground remains limited (Kanowski et al., 2011). Third, the VPA arena of Ghana and other jurisdictions involves multiple stakeholders, for example, civil society organizations (CSOs), the scientific community, international partners, policymakers and decision makers, and the private timber industry. These stakeholders often have competing and conflicting interests, expectations, and positions within domestic settings (Carlsen, 2014), yet decision makers need to integrate their concerns into important decisions about forests, such as in VPAs. This makes Q methodology a valuable tool for engaging key stakeholders and assessing how VPA outcomes are shaped by interactions in formal networks of key actors. The implication is that governance research must address all these groups of actors to reveal areas of consensus and disagreement to support a deliberative process toward advancements in improved on-the-ground practice (EFI, 2013).

Applying the Q Method to Assess Stakeholder Perspectives on Good Forest Governance in VPA

The Q method involves five broad steps: the development of a concourse of statements, Q participants selection, Q sort administration, post-Q sort semi-structured interviews, and Q sort analysis and interpretation.

Development of a Concourse of Statements

The first step involves developing a concourse of statements (i.e., a Q statement).

According to McKeown and Thomas (2013), Q statements can be naturalistic (e.g., statements derived from interviews and communication with relevant stakeholders) or ready-made (e.g., statements derived from literature and existing research), or a combination thereof. From the perspective of ready-made statements, I conducted a review of the literature to develop an initial

50 statements from the PROFOR/FAO and the World Resources Institute good governance frameworks. I adapted the six principles of PROFOR/FAO good governance (i.e., accountability, effectiveness, efficiency, fairness and equity, participation, and transparency) in the form of statements, from accessible secondary and primary data at the national level (e.g., 2009 EU-Ghana VPA, Ghana FLEGT VPA Impact Monitoring System—particularly Impact area F: Forest Governance, Ghana's FAO good governance indicators project).

Given that random sampling is generally inappropriate because Q investigators are interested in determining the range of perspectives of a particular community of people (Stevenson, 2015), the initial statements derived from the literature were pre-tested with stakeholders in the forest sector of Ghana in July 2019. To maximize the validity of the Q statements as reflective of current policy discourse around VPA, I purposively selected and consulted six relevant stakeholders involved in Ghana's VPA process to review and reformulate the initial Q statements for clarity. As stakeholders actively involved in Ghana's VPA process, they are knowledgeable about the issues and how statements should be phrased or reordered to ensure accurate and reliable responses. For example, the interviewees suggested possible clearer and context-specific Q statements. Taken together, the development of the Q statements was consistent with both ready-made and naturalistic sampling principles, because it covered selfreferenced statements and those from literature (McKeown and Thomas, 2013). Finally, I maintained a manageable number of 36 statements (which ensured the comprehensiveness and representativeness of the concourse of statements) and corresponding 36 boxes in the normal distribution chart (see Figure 4.2). These statements reflect the six principles of good governance. The final statements were selected based on the definitions of good governance principles proposed by PROFOR/FAO (see Table 4.1) and how stakeholders operationalized the Q statements in considering the 2018 Amended Ghanaian VPA. Appendix D presents the final statements under each principle of good governance. As argued by Brown et al., (2015), the ratio of the number of statements and participants in a Q study is irrelevant, given that the phenomena that are measured in Q are subjective and synthetic compared to R, which are comprised of what is objective and analytic.

Le	ast agree	ed	N	eutral		Mo	ost agreed
	-3	-2	-1	0	+1	+2	+3
	-3	-2	-1	0	+1	+2	+3
	-3	-2	-1	0	+1	+2	+3
	(2)	-2	-1	0	+1	+2	(2)
		-2	-1	0	+1	+2	
		-2	-1	0	+1	+2	
		(5)	-1	0	+1	(5)	I
			-1	0	+1		
			(7)	0	(7)	I	
				(8)	1		

Figure 4.2. An upside-down fixed quasi-normal distribution chart used in the Q study [sorting grid]

Q Participant Selection

The statistical population for this Q study comprised multiple stakeholders in Ghana's forest sector. In selecting the participants, I combined a network sampling approach with snowball sampling (Bodin & Prell, 2011). This approach was especially important for this Q study as it is commonly used for sampling populations that are difficult to access (Bernard,

2005). Based on both theoretical and pragmatic considerations, recent Q studies (Epstein et al., 2018; Nijnik et al., 2018), and time and resource constraints (Bryman, 2004; Previte et al., 2007), I purposively selected a tentative sample size of 30 Q participants for this study (see Table 4.2). This sample size is sufficiently large "to establish the existence of a factor for purposes of comparing one factor with another' (Brown, 1980, p. 192).

Table 4.2

List of Q Participants Within Each Stakeholder Group

Category of respondent	Number of Q participants
Private timber industry	9
Government forestry agency (national and local)	8
Civil society organizations	7
Research and educational institutions	4
Others (EU delegation in Ghana/FLEGT	2
Facilitator ¹¹)	
Total	30

Q Sort Administration

The next step involves defining the range of distribution of responses. In this research, I used a range of -3 to +3 (as shown in Figure 4.2). This represents a seven-point scale and, as noted by O'Connor (2013), a range of seven points provides sufficient opportunity for Q

 $^{^{11}}$ A FLEGT facilitator is an expert who assesses the institutional and legal landscape with respect to existing mechanisms and attitudes toward a VPA partner country's process.

participants to satisfactorily differentiate themselves in a Q study. The Q sample was constructed, and each of the 36 statements was printed on a separate index card to form a set of clearly defined Q sort statements. The sorting instructions were explained at the beginning of each Q sorting session. In the context of Q methodology, the ranking of the Q statements on a quasi-normal distribution chart is called a 'Q sort' (Dasgupta & Vira, 2005). Through a desk study exercise and face-to-face interaction with Q participants between July and October 2019, each participant was handed the 36 index cards and requested to sort the 36 Q statements on the scale ranging from -3 to +3. As is common practice in Q methodology, we allowed the participants to move the Q cards until they were satisfied or the Q sort best reflected their subjective viewpoints. To minimize any potential or unintentional interactions between participants via Q sorting, I completely randomized the statements after each sorting exercise.

Post-Q Sort Semi-Structured Interviews

As part of the Q sort exercise, semi-structured interview questions (see Appendix E¹²) were used to understand Q participants' reasons for their choice of answers and to allow them to explain in detail what they thought about the topic. I used face-to-face, semi-structured interviews because they are suitable for collecting qualitative data about the perceptions of stakeholders (Creswell, 2007). These interviews were important, since Q participants often recalled VPA discussions that deepened my understanding of VPA good governance practices, especially when it comes to the lowest and highest rank orderings in stakeholders' Q sorts. As noted by Onwuegbuzie and Frels (2015), clarifying Q participants' viewpoints whose pattern coefficients are the highest is important, since a pattern of high coefficients indicates a unique representative for each extracted factor. On average, participants took approximately 40 minutes

¹² The semi-structured interview questions used to investigate good forest governance were informed by Nunan's analytical guide (Nunan, 2018, p. 165–167).

to produce a unique sort and respond to post-Q sort interviews, at places convenient for Q participants (e.g., offices and conference rooms), which is typical of recent Q studies (Black et al., 2019; Webler et al., 2009). The interviews were audio-recorded with the consent of the interviewees.

Q Sort Analytical Process

The 36 completed Q sorts were analyzed using R computational software with an R Q sort package (R Core Team, 2018, version 3.5.3). I assessed the data using the sequential application of correlation (i.e., 30 x 36) and principal component analysis (PCA). Applying the steps proposed by Zabala (2014), factors were extracted using PCA with varimax rotation. The outcome of the Q sort analysis was the selected three factors, each representing one perspective. The factor¹³ analysis using regular PCA permitted the capture of the different stakeholder perspectives and allowed me to structure them in a manner that revealed diverse distinguishing common discourses (Stevenson, 2015).

I transcribed the semi-structured interviews, repeatedly read the transcripts to gain a better understanding of their content, and then cross-checked the transcripts with audiotapes and field notes to avoid any misinterpretation or misrepresentation of stakeholders' viewpoints. By relying on direct quotations to support the quantitative analysis, I obtained a deeper understanding of the topic with empirical evidence that relates to what is known in the current literature. The final steps comprised the verification and communication of the results to Q participants and other stakeholders involved in Ghana's VPA process. For the purpose of confidentiality, the names and positions of the interviewed stakeholders have been anonymized and are only linked to the category of respondents.

¹³ A factor represents Q sorts that define each component, each representing one perspective. A perspective is a hypothetical Q sort that has been reconstructed from the factor scores (Truong et al., 2019; Zabala, 2014).

Results

My analysis of the viewpoints of forest sector stakeholders in Ghana revealed three factors (see Table 4.3): Whilst factor 1 has an eigenvalue of 8.3, factors 2 and 3 have 4.7 and 4.0 eigenvalues, respectively, in the given Q sample. Sixteen Q participants loaded onto factor 1, seven onto factor 2, and five onto factor 3 (see Tables 4.3 and 4.4). The three factors captured 57% (28 + 17 + 16 + 13) of the overall variance (Table 4.3). The comparison between factors demonstrates some degree of variance in allocation from which the eigenvalue of the three factors becomes more distinctive than similar. Table 4.4 summarizes the factor characteristics: the average reliability coefficient, the number of Q sort loadings, the variance in the total dataset, as explained by the factors, the composite reliability, and the standard error of the factor scores. Table 4.5 indicates the consensus statements for all three factors. These are statements of a factor placed at a significantly different location of the Q sort (P < 0.05 level).

Table 4.3Factor Matrix. The Asterisks (*) Indicate the Most Decisive and Defining Individual Q Sort for Each Factor

Q participant		Factor	
	1	2	3
1	0.1901	0.0107	0.8253*
2	0.3875	0.1776	0.5181*
3	0.7492*	0.2086	-0.1682
4	0.3448	0.6410*	0.1135
5	-0.0911	0.5928*	0.1888
6	0.8033*	0.2340	0.0985
7	-0.0684	0.7546*	-0.1227
8	0.7582*	0.1316	0.0093
9	0.3831	0.6727*	0.0258
10	0.5240*	0.2350	0.2029

11	0.4371	0.6926*	0.1521
12	0.6653*	0.0253	0.2604
13	0.7570*	0.2536	0.2125
14	0.5367*	0.4924	-0.0816
15	0.6382*	0.3031	0.3941
16	0.5561*	0.2506	0.4701
17	0.1901	0.0107	0.8253*
18	0.7825*	-0.1545	0.3217
19	0.5687*	0.5357	0.1042
20	0.7713*	0.2681	0.4245
21	0.2405	-0.1181	0.6948*
22	0.6847*	-0.0017	0.4741
23	-0.0229	0.1290	0.3022
24	0.4852*	0.3393	0.0126
25	0.4002*	0.1191	0.2632
26	0.0027	0.2809	0.4734*
27	0.4465	0.4684	0.2800
28	0.8028*	0.2356	0.1653
29	0.3015	0.6831*	0.1468
30	0.3173	0.6560*	0.3851

Table 4.4Statistical summary of Q Method Results

Factor characteristics of the factor loading	Factor 1	Factor 2	Factor 3
Average reliability coefficient	0.8	0.8	0.8
Number of loadings	16	7	5
Eigenvalues	8.3	4.7	4.0
Percentage of explained variance	28	16	13
Composite reliability	0.98	0.97	0.95
Standard error of factor scores	0.12	0.19	0.22

Table 4.5Factor Ranking of Q Statements and Consensus Statements

S#	Q statements		Factor		Consensus	Disagreement
		1	2	3		
1	Existence of platforms for disclosing information to forest sector	$(2)1.68^{14}$	(2)1.52	(-1) -0.75		
	stakeholders in Ghana.					
2	Methods of disclosing information are adapted to meet the needs of	(1)0.51	(1)0.23	(-3) -1.62		
	different stakeholder groups.					
3	Government forestry officials respond to stakeholders' requests for	(0) 0.44	(0) -0.24	(-2) -0.85		X
	information in a timely manner.					
4	VPA-related laws and regulations are reformed and passed in timely	(1)0.64	(-3)-1.86	(3)1.92		X
	manner.					
5	Public disclosure of information as committed in the VPA	(2)0.80	(0) -0.11	(2)0.1.05		
6	Robust verification system for tracking the legality of timber.	(3)1.68	(3) 2.26	(3)1.62	*	
7	Roles and responsibilities of government entities involved in the	(1)0.62	(0) -0.14	(-1)-0.68		
	implementation of VPA process, forest laws, and regulations clearly					
	defined.					
8	Clear legal framework for accountability relationships among executive	(1)0.58	(-1) -0.39	(1) 0.57		
	agencies at national and local levels.					
9	Forestry officials are more answerable for the forest management activities	(2) 0.91	(0) -0.30	(-2) -1.60		X
	carried out.					
10	Civil society organizations (CSOs) have clear role in the VPA process,	(2)1.38	(1) 0.83	(2) 1.19	*	
	including compliance monitoring.					
11	Timber industries have the legal right to challenge administrative	(1)0.65	(1) 0.28	(-3) 1.88		
	decisions.					
12	There is clarity in timber legality assessment and verification under VPA	(3)2.00	(1) 0.89	(2) 1.56		
	arrangements.					
13	The VPA process creates space for and supported the participation of	(2) 1.53	(1) 0.80	(1) 0.83	*	
	CSOs in VPA related decision-making.					
14	Forest sector stakeholder groups are consulted and participated in the VPA	(0) 0.37	(-2) -1.50	(2) 1.067		X
	process.					

¹⁴ Z-scores are standardized scores that show how Q participants ranked each statement overall among the 36 statements used in this Q study. Statements with a Z-score greater than 1 and lower than -1) are considered characteristic of a factor. The Z-scores, thus, create a 'level playing field' for comparing the three factors (Zabala, 2014).

15	Local communities have voices in and influence VPA related decision-	(-3)-1.99	(-3)-1.67	(-2) -1.38	*	
	making processes and outcomes.					
16	Inputs of stakeholders gathered during VPA-related decision making is	(-1)-0.90	(-1) -0.36	(-2) -0.94	*	
	documented and disclosed to relevant stakeholders.					
17	VPA stakeholder platform representations are transparent.	(0)-0.47	(-2) -0.97	(-1) -0.38		
18	Platform with dedicated channels for engaging with and providing	(-1) -0.66	(-1) -0.51	(0) -0.20	*	
	feedback to stakeholder groups on forest-related issues.					
19	Information disclosure mechanism contains comprehensive records of	(1)0.48	(1) 0.21	(1) 0.45	*	
	legally recognized harvesting rights and related permits.					
20	Dispute resolution mechanisms in the forest sector are provided in English	(-3) -1.84	(-1) -0.58	(-2) -1.18		X
	and other languages spoken by a significant segment of Ghanaians.					
21	The VPA makes explicit mention of Social Responsibility Agreements.	(0) 0.17	(1) 0.36	(1) 0.92	*	
22	Local communities perceive participation in VPA processes as fair,	(-2) -1.11	(-2) -1.08	(0) -0.25		
	inclusive, and legitimate.					
23	The VPA process engages the private sector of Ghana.	(-2) -1.07	(-1) -0.80	(0) -0.38		
24	The VPA process provides opportunity for tree tenure rights to be clarified	(-1) -0.75	(-1) -0.75	(0) -0.07	*	
	and well documented in a centralized system.					
25	Forestry laws and regulations reviewed and consolidated under the VPA	(-1) -0.56	(0) -0.31	(1) 0.88		
	process.					
26	There are more valid management plans for the management of forests.	(-1) -0.77	(-2) -0.90	(1) 0.36		
27	Legal compliance with forestry policies, laws, and plans is effectively	(-2) -0.98	(0) -0.34	(-1) -0.69		
	monitored.					
28	Improvement in the collection procedures of forest taxes, royalties, and	(-1) -0.56	(0) 0.11	(-1) -0.43	*	
	forest rents.					
29	VPA and REDD+ actors are collaborating to address illegal logging as a	(-2) -0.95	(-1) -0.66	(0) -0.37		
	driver of forest degradation.					
30	There is evidence of better coordination among national and local law	(-2) -0.99	(-2) -0.92	(-1) -0.67	*	
	enforcement agencies.					
31	Instances of noncompliance are promptly addressed.	(-1) -0.74	(0) -0.08	(-1) -0.48	*	
32	The GhLAS, in particular the WTS, is linked with relevant fiscal	(0) 0.19	(2) 1.24	(1) 0.62		
	requirements and related forest fees by timber companies.					
33	VPA strengthens the capacity of forestry organization for mobilizing	(0) -0.47	(2) 1.28	(0) -0.19		
	domestic resources (e.g., timber taxes).					
34	VPA has the potential to reduce corruption associated with the award of	(0) -0.27	(2) 1.35	(0) -0.00		
	forest concessions, harvesting and trade of timber.					

35	Less time spent on processing timber records for exports.	(0) -0.21	(2) 1.39	(0) 0.36
36	Efficient reconciliation of official data along timber supply chain.	(1) 0.67	(3) 1.74	(2) 1.61

Consensus statements (*) are those statements shared by all three factors and are within a spread of one factor ranking.

Values in bold represent distinguishing statements at or below p < 0.05 statistical threshold. A distinguishing statement is one that is 'most different' from the other statements when they are rank ordered for each idealized Q sort (see Previte et al., 2007).

Areas of disagreement were identified by analyzing the three factor/perspective groups' z-scores with respect to each statement (Zabala, 2014). X-flagging indicates the areas of disagreement held by the three clustered perspectives.

Characterization and Interpretation of the Factors

In this subsection, each Q factor is the average perception of Q participants with similar perspectives.

Perspective 1: Accountability and Civil Society Stakeholder Participation in Decision Making

This perspective explained 28% of the total variance in the Q study. Of the 16 stakeholders who loaded significantly on this perspective, the strongest loading was associated with the private sector (0.8033), followed by civil society (0.7825), and the representative of the government forestry agency (0.7582).

Anchored on the principle of accountability underpinned by a robust legality verification for tracking timber along supply chains and strengthened civil society participation, this perspective displays strong agreement with the claim that forestry officials are more answerable for the forest management activities carried out (+2/0.91). The major reason might be the Multi-Stakeholder Implementation Committee (M-SIC), which contributed to the development and deployment of a robust legality verification system for tracking timber along supply chains (+3/1.68). The M-SIC supports civil society participation in the decision-making process (+2/

1.53). However, of the stakeholders who share this perspective, most of those involved in the post-Q sort interview were concerned that although CSOs are willing to participate in the VPA process, their capacities to implement important activities are weak. Stakeholders who share this perspective also believe that any effort to improve accountability commitments may require that VPA-related laws and regulations be reformed and passed in a timely manner (+1/0.64), and also implemented for efficient reconciliation of data along supply chains (+1/0.67). These agreements highlight substantive reasons for seeing accountability, civil society participation, and policy reforms as an effective response mechanism to change the business-as-usual practices in the forest sector in Ghana. Lastly, respondents sharing this perspective further expressed the disagreement that dispute resolution services are provided in English and other languages spoken by a significant segment of local people (-3/-1.84). From this perspective, the use of the English language will be a significant communication barrier to genuine participation in dispute resolution when Ghana starts the issuance of FLEGT-licensed timber. As one key stakeholder said:

The dispute resolution mechanism for the FLEGT Process in Ghana is through the Timber Validation Committee (TVC) established by L.I. 2254, Regulation 32. The medium of communication is often English. So, if you are not literate there could be challenges in understanding or communicating with the committee.

However, it must be emphasized that the TVC dispute resolution mechanism is related to the anticipated FLEGT licensing and a generic mechanism for the forest sector in Ghana.

Perspective 2: A Robust Legality Verification for Tracking Timber Along Supply Chains

Perspective 2 explained 16% of the total variance in this study. Of the stakeholders who were associated with this perspective, the strongest loading was provided by a forest manager in

the private sector (0.7546); other strong loadings were from the international community (0.6831) and an official from the government forestry agency (0.6926).

The prospective immediacy of an electronic verification system and its potential to ensure legality and reduce corruption and tax leakages relative to the conventional approach, is the first defining aspect of this perspective. An electronic verification system for tracking the legality of timber along supply chains (+3/2.26) is thus regarded as robust technology and innovative practice because of its link with all fiscal requirements (+2/1.24). A key claim is that continued improvements in legislative clarity (+1/0.89) and legal timber verification technology will allow the forest sector to increase its capacity for mobilizing domestic timber and timber taxes (+2/1.28) while reducing corruption in association with the awarding of forest concessions and the harvesting and trade in legal timber (+2/1.35). In contrast to perspectives 1 and 3, individuals espousing this perspective disagreed that VPA-related laws and regulations are reformed and passed in a timely manner (-3/-1.86). Again, they believe that a clear legal framework for promoting accountability relationships among agencies at national and local levels is not positive per se (-1/-0.39). The respondents associated with perspective 2 rejected the notion that all potentially affected stakeholders are identified and consulted in Ghana's VPA process (-2/-1.50). Indeed, a civil society organization (CSO) representative noted that 'although VPA is a multi-stakeholder-led process, it is still being led and dominated by government. Local communities and operators in the informal sector are not actively engaged and involved in Ghana's VPA process.'

Perspective 3: Multi-stakeholder Engagement In Forest Governance Reforms

Perspective 3 represents 13% of the total variance explained in this study and had the fewest members, with only five individuals who loaded significantly on this factor. The strongest

loading of all factors was provided by the representative of the government forestry agency (0.8253), the director of a large timber company in the private sector (0.8253), and the director of a CSO.

This perspective has a strong commitment to regulatory reforms, suggesting that VPA-related laws and regulations are reformed in a timely manner (+3/1.92). Contrary to the second perspective, this perspective stresses the importance of genuine engagement by forest sector stakeholders in the VPA process in Ghana (+2/1,12). As one of the government officials said: 'For example, M-SIC is a multi-stakeholder-led structure, and therefore improves consensus-building and helps government take informed decisions.' Furthermore, the revision of forestry laws and regulations (+1/0.88) emerged as an important effect of Ghana's VPA process. The statement loadings on this factor reveal the perspective that there are more valid forest management plans $(\pm 1/0.37)$. Furthermore, stakeholder in this group strongly disagreed that state forestry officials respond to stakeholders' requests for information in a timely manner (-3/-0.85) and are more answerable for the forest management activities carried out (-2/-1.60). As one respondent from the civil society explained: 'forestry officials at the district level have problems associated with access to information since there is a long chain of protocol or bureaucracy in place.' Furthermore, stakeholders associated with perspective 3 expressed disagreement that forestry officials are more answerable for the forest management activities carried out (-2/-1.60). In short, accountability has not improved significantly. Indeed, respondents belonging to perspective 3 strongly disagreed with the claim that methods of disclosing information are adapted to meet the needs of different stakeholder groups (-3/-1.62).

Consensus and Disagreement

In this subsection, I provide insights into areas of consensus and disagreement among the three distinctive perspectives.

Areas of Consensus

Consensus statements are those statements shared by all three factors with similar rankings and are within a spread of one factor ranking (see Table 4.5). A total of 12 consensus statements emerged from the factor analysis (see Table 4.5). The perspectives maintain positive views toward these consensus statements: Robust verification system for tracking the legality of timber (6), CSOs have clear role in the VPA process including compliance monitoring (10), the VPA process created space for and supported the participation of CSOs in VPA-related decision-making processes (13), the VPA information disclosure mechanism contains comprehensive records of legally recognized harvesting rights and related permits (19), and the VPA makes explicit mention of social responsibility agreements (21). For example, statement 19 is generally positive and any differences are so insignificant that they are irrelevant (perspective 1:1/0.48; perspective 2: 1/0.21; perspective 3: 1/0.45); it is, therefore, not a distinguishing statement.

Perspectives maintain negative views toward the following consensus statements: Local communities have voices in and influenced VPA-related decision-making processes and outcomes (15); inputs of stakeholders gathered during VPA-related decision making is documented and disclosed to relevant stakeholders (16); platform with dedicated channels for engaging with and providing feedback to stakeholder groups on forest-related issues (18); the VPA process provides an opportunity for tree tenure rights to be clarified and well documented in a centralized system (24); improvement in the collection procedures of forest taxes, royalties, and forest rents (28); there is evidence of better coordination among national and local law

enforcement agencies (30); and instances of noncompliance/infractions are promptly addressed (31). Overall, this information suggests a feasible pathway for the development and implementation of the VPA process that emphasizes areas of consensus. It also illustrates the challenges of implementation and the different expectations that the VPA is likely to address in the long term.

Areas of Disagreement

My analysis revealed five areas of disagreement held by the three clustered perspectives (Table 4.5). First, while stakeholders sharing perspective 2 disagree with the claim that VPArelated laws and regulations are reformed and passed in a timely manner (-3/-1.86), perspective 1 (+1/0.64) and perspective 3 (+3/1.92) seem more satisfied with the VPA-related reform processes. Second, inconsistent with the stakeholder-driven paradigm of perspective 2 (-2/-1.50), perspective 1 shows a neutral position (0/0.37) and 3 displays agreement with the claim that all potentially affected stakeholders were identified and consulted during the VPA process (+2/ 1.11). Third, contrary to those stakeholders sharing perspectives 1 (+1/0.51) and 2 (1/0.23), those sharing perspective 3 (-3/-1.62) are more negative in their evaluation of the methods of disclosing information being adapted to meet the needs of different stakeholder groups, and forestry officials are more answerable for the forest management activities carried out. Four, perspective 1 (2/0.91) believes that forestry officials respond to stakeholder's requests for information in a timely manner, perspective 2 respondents were ambivalent about that (0/-0.30), while perspective 3 rejected it (-2/-1.60). All these statements except statement 2 (see Table 4.5) are of special importance, as they are recognized as distinguishing statements for all three perspectives.

Discussion and Emerging Issues

Areas of Consensus

A key consensus relates to the technological advancement in timber supply chain tracking. The governance value of timber legality verification as a FLEGT licensing rule lies in the explicit normative guidance. The legality verification provides an accountable and transparent system, catering for legality assurance in both the domestic and the export market. For environmental regulations to meet legal and sustainable supply chain requirements, legality verification mechanisms must be underpinned by comprehensive records of legally recognized harvesting rights, reinforced by the stakeholders' engagement and institutional and legislative clarity. Though often taken for granted until VPA processes began, maintaining updated and comprehensive records of harvesting rights and related permits, and monitoring instances of noncompliance, are among the main governance challenges (Pepke et al., 2017). I argue that legality verification mechanisms work well when there are clearly defined processes and systems for compliance monitoring, the efficient reconciliation of data, the evaluation of infractions, and the reporting of decisions that allow for inputs from civil society and the identification of unexpected governance gaps (see also Carodenuto, 2019; Tegegne, 2016). Thus, tools for legal verification along the supply chain are as critical as the processes and arrangements, namely how diligently policy actors monitor for non-compliance or the existence of systematic processes for collecting and analyzing infractions for corrective actions or prosecution.

Consistent with the findings of Bollen and Ozinga (2013), my finding is indicative of the Tier 1 legal reforms—often directly related to legal changes required to set up the Ghana wood tracking system and related verification protocols. In fact, more long-term legal reforms, such as tree tenure reforms, continue to be a pressing issue, as reflected in the consensus statements

(statement 24). My analysis revealed negative consensus by Q participants toward tree tenure reforms. The Q participants believed that the VPA process does not provide an opportunity for tree tenure rights to be clarified and well documented. However, there is considerable evidence on policy development processes that contradicts the viewpoint of Q participants on tree tenure (Antwi et al. 2018; Lesniewska & McDermott, 2014; MLNR, 2016). Lesniewska and McDermott (2014) reported that VPA processes may at least trigger legal and governance reforms geared toward tree tenure. In fact, the VPA process, along with other policy developments in Ghana (e.g., Ghana's Cocoa Forest REDD+ Program (GCFRP), has contributed to putting tree tenure and benefit sharing reforms on the political agenda and developing them into concrete policy proposals with considerable support from both the Forestry Commission and CSOs (Antwi et al., 2018; MLNR, 2016). My findings from the factor analysis can be explained by the fact that the Q sort prioritizes issues on which the main discourse is focused, rather than revealing the subtleties surrounding the Q statements.

Nonetheless, the ongoing tree tenure registration to differentiate between natural and planted trees is a costly and bureaucratic process (Antwi et al., 2018). Also, the proposed Framework for Tree Tenure and Benefit Sharing Scheme itself is misaligned with "the realities of ownership structures of customary land regimes" (Antwi et al., 2018, p. 12). Without clear and secure rights, farmers in Ghana may have limited incentives to ensure legal and sustainable forest management. In fact, this could be a major barrier to the effective implementation of forest market mechanisms (Maguire, 2013), particularly outside state forest reserves where local communities often lack legal evidence or statutory ownership of harvested timber in off-reserves (see Hirons et al., 2018; Tegegne, 2016, Tegegne, Cramm, & Brusselen, 2018). Thus, there is an urgent need to revise and enact the proposal for Tree Tenure and Benefit Sharing that considers

underlying socioeconomic and structural dynamics and historical practices, so that local communities, farmers, and operators can fully benefit from VPA implementation.

Additionally, while stakeholder engagement creates strong ownership of and support for the VPA process (Tegegne et al., 2014), the stakeholders had a negative viewpoint toward local communities' direct participation in the VPA process in Ghana (see Table 4.4, statement 15). The viewpoints of the stakeholders contradict the recent findings by Cerutti et al. (2020): "The voices and opinions of many local communities and indigenous people are not only better listened to, but also receive more consideration when decisions are adopted and implemented in the forests where they live" (p. 9). In the specific case of Ghana, the involvement of CSOs in VPA decision making, "appears to assume that such an alliance will also benefit local communities" (McDermott et al., 2020; p. 7). As argued by Satyal (2018), CSOs are not adequate representatives of local communities in such important policy deliberations. This is justified by the fact that stakeholder participation is often driven by pragmatic rather than normative reasons, as the VPA process tend to focus on technical issues rather than on identifying and consulting all potentially affected stakeholders (see perspective 2). During the interviews, most CSOs confirmed this consensus. As one person remarked: "Even though forestdependent communities were occasionally consulted during the VPA negotiations through public education, these less powerful but important stakeholders are still not given actual decisionmaking power in the VPA implementation." Hence, participation in the VPA process as required by Article 16 can be reduced to consultative functions and public education, rather than a deliberative process of stakeholder engagement (see also Carodenuto & Cashore, 2018; Tegegne et al., 2017). Thus, there is a need for a careful context-specific plan to involve non-experts like local communities in the VPA process, as was done in Liberia, where the VPA empowered and

built the capacity of local communities (Bollen & Ozinga, 2013). This is important, because governance-based institutions and their policies to promote participation in policymaking processes must "find new ways that allow marginalized voices and priorities to be heard and included" (Brown, 2009, p. 46) so that seemingly intractable problems can be better addressed.

Areas of Disagreement

My analysis revealed five areas of disagreement across the three clustered perspectives of the stakeholders. Of these five areas, two pertained to the principle of transparency (Q statements 3 and 4), one to participation (Q statement 14), one to fairness/equity (Q statement 20), and one to the principle of accountability (Q statement 9). Thus, the findings show contradictory perspectives on four principles of good governance among forest sector stakeholders. In contrast to perspectives 1 and 2, perspective 3 is more negative in its evaluation of the statement that forestry officials are more answerable for the forest management activities carried out. This difference may be due to the issue of how policymakers are responsive to their constituencies, and the extent to which they can be held accountable for their decisions. A key challenge could be that structural factors such as system bureaucracy undermine the communication between government officials and stakeholders, who often lack the power and means to obtain forest-related information.

Perspective 3 shows that forestry officials do not respond to stakeholders' requests for information in a timely manner, while perspectives 1 and 2 maintained a neutral position.

Contrary to the viewpoint of perspective 3, recent studies that used different methods (Adams et al., 2020; Cerutti et al., 2020) pointed out that the VPA process in Ghana has resulted in improved disclosure of information about forest-related activities (e.g., infractions and corruption), though key issues remain concerning systems put in place for follow-up action. This

follow-up action is critical in the VPA process, because without effective and consistent mechanisms to hold agencies and policy actors accountable, the business-as-usual cycle may continue (see also Hansen et al., 2018).

Furthermore, while perspectives 1 and 3 generally agree that the VPA process has involved considerable consultation with and inclusion of key stakeholders, perspective 2 disagrees. This area of disagreement is unsurprising yet important, because stakeholder consultation and inclusiveness is essential for effective implementation of the VPA process (Kleinschmit et al., 2018; Tegegne et al, 2014). What is remarkable is CSOs' participation in the VPA process. In particular, the specific cases of holding the government forestry agencies accountable—with notable efforts by better organized CSOs and by means of coherent legal frameworks—complement similar findings by Cerutti et al. (2020). Normatively, the participation of diverse stakeholders and not just CSOs is simply "the right thing to do," as it ensures robust accountability in the VPA process (Stirling, 2009, p. 208). While CSOs in Ghana are instrumental in efforts to strengthen accountability through participation (Satyal, 2018), information gathered during my interviews show that limited resources and capacity can undermine their ability to fulfil their governance roles.

Reflections and Limitations

This present research employed Q methodology to provide new insights into good governance practices as applied to the VPA process in Ghana. The results should be interpreted with caution, however, as certain limitations must be acknowledged. A first limitation is related to using Q statements to address all the issues regarding good forest governance principles in detail. To address this limitation, the follow-up interviews during the final stage of the Q sorting exercise allowed the authors to gain additional understanding of the good forest governance

practices. Second, the explanatory power of the Q statements accounted for only 57% of the overall variance. Therefore, it seems fair to say that a large proportion (43%) of the three factors remained unexplained. A third methodological limitation relates to the category and number of Q participants represented in the P-set. As argued by Black et al. (2019), "the theoretical threshold that requires viable factors [to] reach an Eigenvalue greater than 1.0 ultimately restricts the final number of possible factor groups" (p. 17). Thus, a larger sample size may have produced more distinct perspectives from the factor scores, especially if Q participants had represented different stakeholder groups in the forest sector of Ghana that were not engaged in this study (Black et al., 2019).

Finally, due to the methodological difference between Q methodology (e.g., the forced-choice ranking on a quasi-normal distribution) and other mixed-method approaches, I did not make a detailed comparison between my findings and those of other studies on the VPA process. I did, however, use some of these recent studies (e.g., Adams et al., 2020; Antwi et al., 2018; Cerutti et al., 2020; Maryudi et al., 2020; McDermott et al., 2020) as an external validity check to provide valuable insights into key contentious issues. This may contribute to a better understanding of the disputed issues concerning the effect of the VPA process in Ghana. Furthermore, triangulating Q methods with other methods—such as focus group discussions, decision-making tools, modelling, and communication sciences—would bring new and applicable evidence to bear on good forest governance practices. The results of such triangulated methods may have greater potential for extrapolation and generalization.

Conclusion and Implications for Future Research

The present research applied a Q method to examine stakeholder perspectives on good governance as applied to the VPA process in Ghana. I identified and distinguished three

prominent stakeholder perspectives on good governance in relation to Ghana's VPA process. The three perspectives are founded on the belief that good forest governance in Ghana is underpinned by the principles of accountability and civil society participation in decision making, strengthened by multi-stakeholder forest governance reforms and enhanced by an accountable and transparent timber legality verification system for monitoring supply chain commitments. These findings can inform national stakeholders engaged in the VPA process in Ghana.

The Q analysis revealed areas of consensus and disagreement that decision makers and policy actors could focus on to provide strategic planning to strengthen legal and sustainable forest management. Concerning areas of disagreement, there could be benefits to strengthening the active engagement of the different stakeholder groups in genuine deliberation via the Multistakeholder Implementation Committee to better understand these areas of disagreement. Outlining such areas could assist authorities to engage the stakeholders in addressing their concerns. This may enrich the quality of deliberation and stakeholder engagement by providing concrete evidence of validity that key stakeholders can brainstorm. The authorities could also use this opportunity to clarify misinformation and continue to advocate for strengthening good governance in the forest sector. Likewise, the consensus between differing perspectives may be of interest to the authorities. One of the common views that emerged from my analysis is that the actual capacity of the legality verification system for tracking timber along supply chains is robust. Since timber legality verification has been so contentious (see also Nathan et al., 2014), it was reassuring to find a consensus in stakeholder perspectives on legality verification as an example of good practice in Ghana's VPA process.

On a more practical level, the study provides concrete empirical evidence for strengthening forest governance and sheds light on the challenges and opportunities for strategic implementation. This should lead to a better understanding among the agencies and actors responsible for tackling illegal logging, forest degradation and deforestation, and climate change. Methodologically, this study provides additional recommendations to scholars of forest policy and governance to apply Q methodology. At the same time, practitioners and problem-focused scholars in interdisciplinary research could benefit from making greater use of Q methodology. Furthermore, while the participatory nature of Q methods supported meaningful multi-actor participation for evaluating environmental policy process, my discussions could not benefit directly from the views of communities and other unorganized stakeholder groups in the forest sector of Ghana. Thus, future research could triangulate with other methods by incorporating their views to better inform policy and improve practice on the ground. Finally, I recommend further research into these contestations, in light of the revealed limitations of the Q methodology.

Chapter 5: Conclusions

The European Union (EU) Forest Law Enforcement, Governance, and Trade (FLEGT)

Action Plan is part of broader international initiatives aimed at solving critical global
environmental problems that policymakers have consistently advocated for adoption, particularly
in tropical forest countries. A Voluntary Partnership Agreement (VPA) under the FLEGT
process is a commitment by partner countries to tackle the complex challenges we face in the
forest sector, ranging from illegal logging and the related trade, to weak forest governance issues
such as corruption, with achievements assessed periodically by FLEGT policymakers,
implementers, and researchers to measure progress. The approach taken in the present research
was to critically examine FLEGT efficacy from a multi-scalar governance perspective so as to
address the following under-researched questions, using a case study approach:

- 1. How do the New York Declaration on Forests (NYDF) and the United Nations

 Strategic Plan for Forests (UNSPF) interlink with the FLEGT Action Plan at two
 critical policy levels, namely policy objective and policy instrument?
- 2. Focusing on priorities set out in the VPAs, what are the potential and realized capacities of VPA partner countries for advancing principles of good governance and implementation of a Timber Legality Assurance System (TLAS) in Cameroon, Central African Republic (CAR), Ghana, Liberia, and the Republic of the Congo (Congo)?
- 3. What are the different stakeholders' perspectives on good governance as applied to VPA in Ghana?

These research questions were addressed in the previous three chapters. Chapter 1 discussed interlinkages among FLEGT, NYDF, and UNSPF at the global level at two critical

policy levels, namely policy objectives and policy instruments. A process-based approach was used to review and capture the core attributes of the regimes studied with their policy objectives/strategic agendas and policy instruments. The research revealed that FLEGT, NYDF, and UNSPF share inherent interlinkages of policy instruments, such as information sharing, strategic plans, and financial and capacity support. In general, three types of potential contributions to a number of strategic agendas are observed in the three regimes. These potential contributions can be direct (FLEGT, NYDF, and UNSPF contribute finance for forests and good forest governance) or indirect (FLEGT makes an indirect contribution to halting forest loss by promoting legal timber verification), or there may be no contribution. For example, NYDF does not yet play a substantial role in technology transfer in the forest sector, but it is explicitly recognized in FLEGT and UNSPF as enhancing sustainable forest management benefits. Thus, interlinkages can be found in the policy objectives of the regimes studied, although they target different but common cross-cutting strategic agendas for promoting sustainable forest management (SFM).

The only strategic agendas that have been widely recognized in the three regimes as underpinning all conservation and forest management are the four cross-cutting strategic agendas: good forest governance, finance for forests, climate change mitigation & adaptation, and forest loss. This finding could ideally contribute to achieving the common strategic agendas on good forest governance and finance for forests in FLEGT, NYDF, and UNSPF simultaneously, through the prioritization of policy instruments, particularly information sharing. Information sharing, thus, becomes a key factor for continuous inter-institutional learning as the global policy process reveals incoherencies within the current global forest governance architecture. Thus, it requires the strengthening of the Collaborative Partnership on Forests

(CPF) and the provision of appropriate mechanisms to enhance coherence, cooperation, policy coordination, and to support informed decision making at the global level and to deliver cross-cutting strategic agendas on the ground.

On a larger scale in terms of fragmented international regimes, there may be a crucial need to address potential barriers or challenges related to the realization of interlinkages, as they are relatively new issues at the global policymaking level and landscape level (Tegegne, Cramm, & Brusselen, 2018). The question how to manage interlinkages at the landscape level given persistent deforestation and forest degradation, cannot be treated simply as a conventional forest sector matter without considering its interaction with other sectors. Here, I argue that identifying and managing the range of interlinkages between forests and other sector policies, such as agriculture and mining, is a necessary step toward promoting SFM. Interlinking the policy goals of the three regimes and implementing their policy tools/strategies should be further reflected in fiscal capacity, since financial mechanisms are mostly pledges made by some key actors.

Drawing on a theoretical framework derived from literature on institutional capacity for good forest governance, Chapter 3 comparatively analyzed the potential and realized capacities of VPA processes for advancing principles of good forest governance and the implementation of the TLAS in Cameroon, Central African Republic, Congo, Ghana, and Liberia, as well as the challenges that hinder the implementation of VPAs. My case study approach included a desk study, a meta-analysis of cases, and communication with country VPA focal points to understand the complexity of a VPA's progress. I found that VPA processes do have potential capacities for advancing information transparency, multi-stakeholder participation, and TLAS. In fact, the VPAs have been largely successful in the negotiation phase, but there are complex political, technical, and capacity issues that in most cases have contributed to a lagging implementation

phase in most of the VPA partner countries. Unlike in Ghana, Liberia, and Congo, where progress and realized capacities are more pronounced, the realized capacities of VPAs in Cameroon and the CAR are limited.

While there are prospects of progress in these latter countries, such challenges as weak and inconsistent legal frameworks, insufficient financial resources, and long-term conflicts have slowed down the implementation of VPAs. Furthermore, the VPA progress in these countries is impaired by the dependence on external funding sources, as well as the lack of greater efforts and genuine commitment by the countries to advance principles of good forest governance and TLAS. Despite different contexts and stages of implementation, there are still important areas for improvement within the current practice. In each country, efforts to strengthen transparency and accountability should include addressing unequal participation in the VPA process, providing incentives to encourage inclusive participation, and making information accessible and available to all stakeholders, especially the local communities. In sum, FLEGT policymakers and implementers need to foster a deliberative mechanism that promotes the benefits of VPA processes, engaging all stakeholders.

In Chapter 4, I discussed the Q methodological approach I used to examine stakeholder perspectives on good governance as applied to Ghana's VPA process. By drawing on the good governance framework (PROFOR/FAO, 2011) and VPA policy documents in Ghana, I identified and distinguished three prominent stakeholder perspectives on good governance as it relates to Ghana's VPA process. The three perspectives are founded on the belief that good forest governance in Ghana's forest sector is underpinned by the principles of accountability and civil society participation in decision making, strengthened by multi-stakeholder engagement in forest governance reforms and enhanced by a single accountable and transparent timber legality

verification system for monitoring supply chain commitments. These three main perspectives accounted for approximately 57% of the total variation in viewpoints, which characterized the stakeholder perception about current good governance practices as applied to Ghana's VPA in the lead-up to the FLEGT licensing.

The three distinct perspectives were further linked to consensus statements. The consensus among stakeholders is that a VPA seems to have allowed for the participation of civil society in decision making and the establishment of a robust verification system to promote transparency and accountability, which are critical for sustainable forest management. Additionally, a shared consensus is key in approaching leveraging points to internalize forest governance practices as well as foster VPA transformation in Ghana. The shared perspectives among stakeholders highlight the crucial role of the VPA in promoting improved forest governance in Ghana. However, there were still areas of disagreement or tension with regard to issue of accountability and the marginalization of some stakeholders in forest governance. These findings can inform the national government of key VPA good practice examples such as information transparency, accountability, and stakeholder legitimacy. Engaging with and shaping these perspectives is an instrumentally and normatively appropriate governance action to advance the VPA process in Ghana. This approach is critical for overcoming realized capacity challenges that are currently confronting all five VPA partner countries discussed in Chapter 3 that are implementing the good forest governance requirements.

Taken together, my dissertation has highlighted the challenges, including the struggle to manage the interlinkages among global-level policy developments (i.e., FLEGT, NYDF, and UNSPF) and a lack of capacity for the VPA process. For example, the current limited progress means that partner countries are not well equipped with the requisite capacities for VPA changes,

and that capacity remains a prerequisite for policy implementation. These findings indicate that additional institutional effort will be needed to advance FLEGT globally and to achieve the VPA in Africa and beyond. It also requires collective actions by global-level, national-level, and local-level institutions to consider the larger forest governance contexts and prioritize concrete actions to overcome challenges to policymaking process, especially policy implementation. Below, I further identify key contributions and interventions points.

Theoretical, Methodological, and Policy Implications

The scholarship on FLEGT has overwhelmingly focused on technical and governance aspects, drawing largely from a single institutional analysis theory. However, scant empirical research has explored a range of theories to understand FLEGT efficacy from a multi-scale perspective. My dissertation contributes to a multiple governance scale approach to FLEGT by using two strands of theories—namely policy coherence and institutional capacity for good forest governance—to answer some of the most critical questions that have arisen since FLEGT first emerged in 2003. Reflecting on the three empirically informed chapters, this dissertation complements other multi-scalar scholarly works that examined forest governance across multiple scales (Leipold, 2015; Secco et al., 2014). It also contributes to the literature on multi-scalar forest governance within the FLEGT context. Thus, it represents part of preliminary efforts to examine FLEGT from a multi-scalar governance perspective.

In Chapter 2, I discussed my research directed toward policy coherence from a policy design approach perspective, which allowed me to analyze interlinkages among FLEGT, NYDF, and UNSPF. I argued that a regime that is coherent within the context of my analytical framework may turn out to be interlinked with another regime and potentially contribute to common strategic agendas at the global level. My analytical framework may help set the overall

context for analyzing other international forest regimes. However, indirect and no contributions from international forest regimes might be the most challenging to identify at the landscape level when national and relevant global experts are not consulted. In Chapter 3, I showed that the institutional capacity framework underlines the relevance of conceptualizing institutional capacity in terms of potential and realized capacity, which provided useful analytical traction for assessing a broader perspective of FLEGT governance. In Chapter 4, I expanded on the institutional capacity for advancing good forest governance discussed in Chapter 3. This good forest governance conceptual framework contributes to existing literature on institutional analysis by operationalizing and communicating the assessment of institutional capacity to achieve good forest governance.

Regarding methodology, my approach presented in Chapters 2 and 3 can be adapted to various policy framework analyses, according to the research objectives pursued as well as time and resources. In doing so, it is useful to identify strategic and relevant policy documents, perform meta-analysis of cases that provide relevant information on the subject matter at hand, and complement these sources with experts' interaction, as was done in the research underlying this dissertation. In Chapter 4, I presented the first use of Q methods to better understand stakeholder perspectives on good forest governance as applied to the VPA process in Ghana, and in FLEGT VPA scholarship. Thus, this dissertation provides an additional recommendation to students of forest policy and governance to apply Q methodology. At the same time, practitioners and problem-focused scholars in interdisciplinary research could benefit from making greater use of Q methodology. Additionally, it may illuminate how key stakeholders define and operationalize good forest governance principles within a specific country context.

My dissertation provides grounds for practice-based policy development by offering three

important recommendations for policymakers. Chapter 2 underscored the importance of managing potential interlinkages among FLEGT, NYDF, and FLEGT in a mutually reinforcing manner that best promotes the strategic agendas for SFM. Of particular relevance to both policymakers and practitioners is the development of cross-cutting strategic agendas, such as finance for forests and good forest governance. It is equally imperative to map out these cross-cutting strategic agendas that interest key policy actors in global-level policy processes at the national level through inclusive governance approaches (Tegegene et al., 2017). For example, such delineation can encourage the key policy actors to pay more attention to the larger international financing regimes, in particular the agro—forestry interface, with emphasis on sustainable agriculture—which is a prerequisite for achieving zero net deforestation (Humphreys et al., 2019). As noted by FAO (2018), policymakers must recognize the need to manage interlinkages and trade-offs, and set out concrete measures for the effective alignment of multiple global-level forest policy objectives and incentive structures (e.g., alignment or harmonization of fulfilled financial pledges).

Forging interlinkages between global-scale policy developments at both national and subnational levels is essential for achieving SFM. For example, a number of mutual benefits will accrue to SFM (e.g., effectiveness and efficiency in the forest sector overall) from managing interlinkages among FLEGT, NYDF, and UNSPF at both the global and the national level. As such, managing interlinkages should be a task for both international organizations at the global level and national governments. In addition, sharing the information needed to monitor progress, along with making available diverse data useful for the policymaking process, and especially policy implementation, is important for all (HLPF, 2017). In fact, this is crucial because little effort has been made to promote synergies between FLEGT and other global forest-related

agreements at the national level, where implementation occurs (Tegegne et al., 2014; Tegegne et al., 2017; Ochieng et al., 2013). For key national actors at the policy and planning level to become knowledgeable on how to manage interlinkages of international forest regimes, capacity building, inter-institutional learning, inter-sectorial coordination, and information sharing are critical. For example, inter-institutional learning could be piggybacking in engaging stakeholders and on discussions related to policy and regulatory reviews. These reviews are critical to align with new or additional changes related to emerging strategic agendas, such as bio-economy, that have occurred since the development of the FLEGT.

Effective inter-institutional learning requires dialogue and coordinated actions, with a focus on achieving cross-cutting strategic agendas for SFM and benefiting from interlinkages, rather than on a single global-level policy development. This inter-institutional learning should include precise strategic guidelines to support international stakeholder forums on how to work with each other to foster national level interlinkages. Overall, secured and renewed political commitments are important to enhance the coherent implementation of global and national forest-related policies in developing countries.

With reference to Chapter 3, modest investment in regional capacity sharing and peer-to-peer policy learning among countries could have a significant effect on the realized capacities for the VPA process in Cameroon, CAR, Congo, Ghana, and Liberia. More importantly, the exchange of knowledge via capacity platforms would advance the cause of domestic resource mobilization (i.e., progressive timber taxation and collaboration with the local financial sectors to lay the groundwork for domestic funding). Regarding political instability, international and national institutions in VPA countries should leverage the expertise and resources of the FLEGT VPA in their conflict resolution architectures and initiatives. The role of

CSOs in conflict resolution efforts requires special attention.

It is a challenge to ensure that VPA planning and implementation are both fair and inclusive. The current approach to engage local communities and the private timber sector, in particular the informal network of operators (e.g., chainsaw operators and small and medium-sized timber companies), is seen as inadequate. Consequently, there is an urgent need for FLEGT policymakers and implementers to further explore innovative and genuinely participatory approaches to local VPA policymaking, and to find new ways to incentivize the informal timber sector and local communities to channel their efforts and knowledge to the VPA process in the five countries studied. Thus, paying due attention to local issues of interest and local actors' voices matters in forest governance. FLEGT policymakers and implementers are also encouraged to find ways to strengthen political will and engage political leaders more effectively in the VPA negotiation phase, recognizing that they represent key actors of national policy agendas. In all five partner countries studied, systematic public–private partnerships are required to address barriers to the sustainable financing of VPA, such as technical capacity and budgetary constraints, and to the internalization of TLAS to address illicit logging practices and related forest tax invasion or corruption along the timber supply chain. Overall, further improvements in the forest governance system is crucial in all partner countries studied.

In Chapter 4, I strongly recommended that FLEGT policymakers and the implementers should pay special attention to three unique perspectives espoused by stakeholders in the VPA process to inform future implementation in Ghana's forest sector. From a context-specific perspective, identifying with a common ground (i.e., a shared consensus) can provide leveraging points to encourage the VPA multi-stakeholder platforms to build mutual interests and legitimate VPA governance measures that are effective, implementable, and successful. The consensus

between differing perspectives may be of interest to FLEGT policymakers and lead implementers. One of the common views that emerged from this analysis is that the actual capacity of the legality verification system for tracking timber along the supply chain is robust. Since timber legality verification has been so contentious (see also Nathan et al., 2014), it was reassuring to find a consensus in stakeholder perspectives on legality verification as a good practice example in Ghana's VPA process.

Conversely, I found the areas of disagreement to be key conflicts points within the context of the VPA process in Ghana that may present barriers to its transformational agenda. I suggest that policymakers and implementers should target these critical areas in order to reduce potential conflicts among key stakeholders in Ghana's VPA process in the lead-up to and the aftermath of the FLEGT licensing. Indeed, in the areas of disagreement, it could perhaps be beneficial to actively engage the different stakeholder groups in genuine deliberation via the Multi-stakeholder Implementation Committee to better understand these disagreements. Once the areas of disagreement are outlined, this could assist FLEGT policymakers and implementers to engage the stakeholders in addressing their concerns. This may enrich the quality of deliberation and stakeholder engagement and consultation by providing contentious issues that key stakeholders can brainstorm. Also, the authorities could use this opportunity to clarify misinformation and continue to advocate for the implementation of good governance requirements. On a more practical level, this dissertation provides concrete empirical evidence for strengthening forest governance and sheds light on the challenges of and opportunities for strategic implementation. This should lead to a better understanding of incentives for the different institutions (agencies and actors) responsible for tackling illegal logging, forest degradation and deforestation, and climate change in Ghana's forest sector.

Again, regarding methodology, I employed a case study design (Simons, 2009; Yin, 2003). To gain a better understanding of the interlinkages and contributions of FLEGT, NYDF, and UNSPF to SFM discussed in Chapter 1, I initially intended to collect empirical data from experts (e.g., the Global Forest Expert Panel). Unfortunately, this effort yielded no positive feedback mainly due to challenges related to the inability of experts to complete my online survey through emails or phone calls, as well as to resource and time constraints on conducting face-to-face interviews. The conceptual challenges related to the research presented in Chapter 2 arose from a lack of a universally agreed definition of "policy coherence" and an analytical framework for analyzing interlinkages. In the absence of scholarly agreement on definitions among researchers, methodologies and analytical guides are unlikely to be clear and robust. Even though I explored these gaps in the literature and provided groundwork for future multi-policy interlinkage analysis, I suggest that future research should build upon my initial analytical frameworks and on the innovative ways in which policy coherence relates to institutional capacity for good forest governance. My framework further highlights a set of comparison elements that researchers often overlook when analyzing interlinkages at the global level and how global level governance influences national-level policies, and vice versa. Such an approach suggests two future research directions: What determines the effectiveness of strategies for managing interlinkages, and when are such strategies desirable?

To assess the institutional capacity of the VPA process and the implementation challenges, I selected five partner country cases (Chapter 3) out of eight in sub-Saharan Africa and out a total of 15 partner countries. Future research on institutional capacity could thus be conducted in the three other partner countries in sub-Saharan Africa and in partner countries elsewhere. Furthermore, while good governance has six principles (PROFOR/FAO, 2011), my

analysis in Chapter 3 covered only two (transparency and participation). To that end, future research is needed to investigate the potential and realized capacity of VPA processes for advancing the other four principles of good governance. One of the most important methodological limitations highlighted in my analysis of institutional capacity for the VPA process, is that it is possible that these developments do not appear in policy documents and countries' annual progress reports, or that countries implementing the VPA may have advanced beyond the secondary data we reviewed, which could affect the findings and conclusions presented in Chapter 3.

I employed Q methodology to examine stakeholder perspectives on good forest governance practices as applied to Ghana's VPA. While this case study is representative of the frontrunning of VPA partner countries in Africa, as argued in Chapter 4, an assessment of other partner countries that includes the participation of and representation from local communities could yield valuable insights into how a large sample size affects stakeholder viewpoints regarding good governance practices in the forest sector. Besides, future research should include current and future challenges and opportunities related to the introduction of mixed forest monitoring technologies (e.g., TLAS) into the forest governance systems in the global South. In these future studies, both internal and external factors as well as global-level policy goals should be analyzed to provide a more comprehensive account of the positive and negative effects of forestry technology in the long term. Finally, global forestry research should be more geared toward multi-scalar governance assessment using Q methodology in different policy settings. This multi-scalar approach should be used to analyze comparatively large studies that can serve as a solid basis to develop a better understanding of the "theory of change" in the context of the FLEGT implementation Work Plan 2018–2022. Likewise, future research is recommended to

address the deeply rooted causes of illegal logging, especially the politico-economic context and the historical trajectories, power relations, and power struggles of actors in the VPA process. For instance, an in-depth assessment of the power relations between the actors involved in the VPA process may allow us to better understand the interests of and incentives and disincentives for different actors in the VPA process.

This concluding chapter has summarized the key research findings and policy implications, highlighting the need to:

- Increase awareness of the interlinkages among the regimes studied (i.e., FLEGT, NYDF, and UNSPF) through inter-institutional learning, informational sharing, and inter-sectorial coordination, and promote the benefits of interlinkages to policymakers and beyond;
- Recognize the importance of policy interactions and their effects at the landscape level, better align global level policies and policy instruments, address outstanding governance reforms, and continue technical support and capacity building;
- Strengthen the financial and governance capacities, and invest in transforming the informal timber sector to unlock neglected FLEGT opportunities and improve the forest sector employment and livelihoods prospects; and
- 4. Undertake detailed analytical and interdisciplinary studies.

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Appendices

Appendix A: Strategic Agendas That Are Addressed in This Study and Their Definitions

Strategic agenda	Definition		
Forest loss	Loss of tree cover.		
Climate change mitigation & adaptation	& Mitigation concerns the role that forests play in reducing greenhouse gas emissions or increa the capacity of carbon sinks through reforestation, while adaptation refers to the role that for play in lowering the risks posed by the consequences of climatic changes (van Dam, 2019; N 2019).		
Forest biodiversity	Forest biodiversity include trees, plants, micro-organisms and the genetic diversity (van Dam, 2019).		
Finance for forests	Finance for forests refers to all possible financial sources that benefit the forest sector (Humphreys et al. 2019). This includes finance that is aligned with a clear and stated objective of the conservation, protection, and sustainable forest management initiative (NYDF, 2019).		
Good forest governance	A concept that includes, but is not limited to, "respect for the rule of law in forest activities, transparent resource management, participatory rights in decision-making, equitable and secure land tenure, the control of corruption, and local levels of use and management" (NYDF, 2019, p.11). Good forest governance is a necessary condition for forest protection, conservation, and sustainable forest use (NYDF, 2018).		
Forest technology transfer	The transfer and application of tools, techniques, methods, and systems (e.g., wood tracking system) to practical tasks of forest protection, conservation, and sustainable forest use (Hetemäki e al. 2010).		

Appendix B: Inventory of FLEGT Action Plan, NYDF, and UNSPF

The European Union (EU) Forest Law Ent	forcement, Governance, and Trade (FLEGT) Action Plan
Type of development	Action Plan
Year of establishment	2003
Key policy objective(s)	FLEGT Action Plan aims to reduce illegal logging by strengthening sustainable and legal forest management, improving governance, and promoting trade in legally produced timber.
Key policy instrument(s)	Timber legality assurance system, information transparency annex, environmental and social safeguards, independent audit, multi-stakeholder structures.
	EU Regulation No. 2173/2005 and EU Regulation No. 995/2010 for the control of the entry of timber to the EU from countries that entered into bilateral FLEGT VPA with the EU. Other policy instruments include information sharing and financial and technical capacity building.
Relevance to SFM	By supporting VPA countries in tackling illegal logging and the related trade, VPAs can improve the policy and institutional factors surrounding legal production and consumption of timber. Support country-level legal, policy, and institutional framework for forest management and forest sector economic growth.
Strategic agenda(s)	Good forest governance, finance for forests, independent compliance scheme.
Source(s)	EC, 2003a, EC 2020; Tegegne, 2016; Tegegne, Cramm & Brusselen, 2018; van Dam, 2019
New York Declaration on Forests (NYDF)	
Type of development	Declaration ¹⁵ : The NYDF is a non-legally binding declaration that arose out of a political dialogue among a broad coalition of governments, companies, civil society, and indigenous peoples' organizations.
Year of establishment	2014
Key policy objective(s)	The NYDF provides endorsers, who now number over 200, of an ambitious declaration detailing ten goals that provide them with global targets to protect and end natural forest loss by 2030. Goal 1: Halt loss of natural forests Goal 2: Efforts to address deforestation in agriculture supply chain Goal 3: Reduce deforestation derived from other economic sectors Goal 4: Support alternatives to deforestation driven by basic needs Goal 5: Restore degraded landscapes and forestlands Goal 6: Include ambitious, quantitative forest conservation and restoration targets for 2030 in the post-2015 global development framework, as part of the new Sustainable Development Goals. Goal 7: Reduce emissions from deforestation and forest degradation as part of a post-2020 global climate agreement Goal 8: Mobilize finance for forests Goal 9: Reward successful emission reductions Goal 10: Improve forest governance
Key policy instrument(s)	Voluntary instruments, e.g., political commitments and pledges, information sharing, codes of conduct and guidelines for providing information and reporting, and financial resources to support governments, companies, civil society, and indigenous peoples' organizations.
Relevance to SFM	By committing to the ten goals of the NYDF, endorsers have agreed to work toward halving tropical deforestation by 2020 and ending it by 2030.
Strategic agenda(s)	Climate change, biodiversity conservation, finance for forests, and good forest governance
Source(s)	van Dam, 2019; UN, 2014a; NYDF, 2018; 2019
United Strategic Plan for Forests 2017-203	0 (UNSPF 2017-2030)

¹⁵A declaration (non-legally binding instrument) that is usually, but not always, used by NYDF parties to declare political ambitions and aspirations (van Dam 2019).

Type of development	Resolution ¹⁶ - The UN strategic plan for forests 2017-2030 provides a global framework for action at all levels to sustainably manage all types of forests and trees outside forests, and to halt deforestation and forest degradation.
Year of establishment	2017
Key policy objective(s)	The strategic plan provides a framework for forest-related contributions to the implementation of the 2030 Agenda for Sustainable Development and other international forest-related instruments, processes, commitments, and goals. The six global forest goals as defined in the UNSPF 2017-2030 include: Goal 1: Reverse the loss of forest cover worldwide through SFM, including protection, restoration, afforestation, and reforestation, and increase efforts to prevent forest degradation and contribute to the global effort to address climate change; Goal 2: Enhance forest-based economic, social, and environmental benefits, including by improving the livelihoods of forest-dependent people; Goal 3: Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests; Goal 4: Mobilize significantly increased, new and additional financial resources from all sources for the implementation of SFM and strengthen scientific and technical cooperation and partnerships; Goal 5: Promote governance frameworks to implement SFM, including through the UN Forest Instrument, and enhance the contribution of forests to the 2030 Agenda; Goal 6: Enhance cooperation, coordination, coherence, and synergies on forest-related issues at all levels, including within the UN system and across CPF member organizations, as well as across sectors and relevant stakeholders.
Key policy instrument(s)	Funding, information and education, forest-carbon offsetting, reporting, capacity and technological transfer.
Relevance to SFM	The UN strategic plan for forests represent an international forest policy agenda. At the heart of the UNSPF are six Global Forest Goals and 26 associated targets to be achieved by 2030.
Strategic agenda(s)	Good forest governance, climate change, biodiversity conservation, finance for forests, sustainable bio-economy
Source(s)	UNFF, 2017

¹⁶A UN resolution is a formal text or statement adopted by a UN body. A UN General Assembly resolution is also known as "recommendations" in accordance with Article 10 and 14 of the UN Chapter (van Dam, 2019).

Appendix C: FLEGT VPA related documents per country reviewed

Countries (5)	Joint annual progress report	Voluntary Partnership Agreements	Aide-mémoire from Joint Implementation Committee	EFI EU FLEGT Facility Highlight and Insights
Cameroon	2013–16	EU-Cameroon, 2011	Aide-mémoire from 1 st –8 th JIC meetings	2017; 2018
Central African Republic (CAR)	2012; 2015; 2016	EU-CAR, 2012	Aide-mémoire meetings from 1st-4th JIC	2017; 2018
Republic of the Congo (Congo)	2016	EU-Congo, 2010, 2014 negotiations	- Aide-mémoire from 1 st -8 th JIC meetings	2017; 2018
Ghana	2009–10; 2011; 2012	EU-Ghana, 2008; 2009	Aide-mémoire from 1 st -9 th JMRM	2017; 2018
Liberia	2011–12; 2014	EU-Liberia, 2010; 2011	Aide-mémoire from 1 st -5 JIC	2017; 2018

Appendix D: Sample Q Sort Guide

Name of interviewee	
Gender (Male or Female)	
Name and category of organization (e.g.	
government, CSO, Private sector, etc.)	
Email address	
Telephone number	
Number of years involved in VPA Process	

For each Q statement, you are kindly asked to: (a) sort the following Q statements (cards) into their relative important groupings (from -3 least agreed good governance practice as applied to VPA to +3 most agreed good governance practice as applied to VPA) in Ghana. Any additional comments or reasons for the ranking are very important and welcome.

Principles of Good forest Governance and their corresponding Q statements

Principle	Q statements
Accountability	S#7: Roles and responsibilities of government entities involved in the implementation of VPA process, forest laws, and regulations clearly defined. S#8: Clear legal framework for accountability relationships among executive agencies at national and local levels. S#9: Forestry officials are more answerable for the forest management activities carried out. S#10: Civil Society Organizations (CSO) have clear role in VPA process, including compliance monitoring. #16: Inputs of stakeholders gathered during VPA-related decision-making is documented and disclosed to relevant stakeholders.
Effectiveness	S#26: There are more valid management plans for management of forests. S#27: Legal compliance with forestry policies, laws, and plans is effectively monitored. S#29: VPA and REDD+ actors are collaborating to address illegal logging as a driver of forest degradation. S#30: There is evidence of better coordination among national and local law enforcement agencies. S#31: Instances of noncompliance/infractions are promptly addressed. S#32: The GhLAS, in particular the WTS, is linked with relevant fiscal requirements and related forest fees by timber companies.
Efficiency	S#6: Robust verification system for tracking legality of timber. S#28: Improvement in the collection procedures of forest taxes, royalties, and forest rents. S#33: VPA strengthens the capacity of forestry organization for mobilizing domestic resources (e.g., timber taxes). S#34: VPA has the potential to reduce corruption associated with the award of forest concessions, harvesting and trade of timber. S#35: Less time spent for processing timber records for exports. S#36: Efficient reconciliation of official data along timber supply chain.
Fairness/equity	S#11: Timber industries have the legal right to challenge administrative decisions. S#17: VPA stakeholder platform representations are transparent. S#20 Dispute resolution mechanisms in the forest sector are provided in English and other languages spoken by significant segment of Ghanaians. S#21: VPA makes explicit mention of Social Responsibility Agreements. S#22: Local communities perceive participation in VPA processes as fair, inclusive, and legitimate. S#24: The VPA process provides opportunity for tree tenure rights to be clarified and well-documented in a centralized system.
Participation	S#13: The VPA process creates space for and supported the participation of CSOs in VPA related decision-making.

	S#14: Forest sector stakeholder groups are consulted and participated in the VPA process. S#15: Local communities have voices in and influence VPA related decision-making processes and outcomes. S#18: Platform with dedicated channels for engaging with and providing feedback to stakeholder groups on forest-related issues. S#23: The VPA process engages the private sector of Ghana.
Transparency	S#3: Government forestry officials respond to stakeholders' request for information in a timely manner. S#1: Existence of platforms for disclosing information to forest sector stakeholders in Ghana. S#2: Methods of disclosing information are adapted to meet the needs of different stakeholder groups. S#4: VPA-related laws and regulations are reformed and passed in timely manner. S#5: Public disclosure of information as committed in the VPA. S#12: There is clarity in timber legality assessment and verification under VPA arrangements. S#19 Information disclosure mechanism contains comprehensive records of legally recognized harvesting rights and related permits. S#25: Forestry laws and regulations reviewed and consolidated under the VPA process.

Appendix E: Example of a Post-Q sort interview

The purpose of these thematic research areas is to understand good governance performance and barriers to the implementation of good governance requirements or the VPA process in Ghana. I personally seek your consent to audio-record the interview and take notes. Please comment on the following aspects of VPA in Ghana based on your opinions and experiences.

1. Transparency and accountability

- a. What VPA information/decisions are communicated to you? If no information is disclosed to you, can you explain why?
- b. To what extent should VPA information be made public?
- c. What are the systems and processes that are put in place to hold the Forestry Commission and VPA structures to account, how frequently are they used and how effective are they, and why?
- d. What mechanisms require downward accountability as well as upward accountability? In which of these pathways is there evidence of accountability?

2. Participation, fairness, and equity

- a. What mechanisms are available to enable multi-stakeholders to participate in and influence VPA decisions and outcomes?
- b. What is the basis of VPA representation at negotiation and implementation levels?
- c. Why does VPA representation change between levels, and with what implications?
- d. Have the interests of all stakeholders been sought and considered during the VPA negotiation process and during the implementation?

3. Effectiveness and efficiency

- a. What are the challenges (weaknesses and threats) associated with implementing the governance requirements of Ghana's VPA? In other words, what hinders or enables implementation of VPA requirements?
- b. What opportunities or strengths exist for enabling more effective VPA process?
- c. How is the Forestry Commission of Ghana adapting to VPA structures as a result of the FLEGT policy?

Thank you very much for your time and contribution to this interview.

Appendix F1: Copyright Clearance

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