TECHNICAL REPORT

ILLICIT TRADING IN AFRICA'S FOREST PRODUCTS: FOCUS ON TIMBER

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1.0

Introduction

It is estimated that between 50%-90% of Africa's trade in tropical timber and products is illegal[1] which has a significant negative impact on any national economy. It is well-documented that economic activities operating outside the law impact the economy, exacerbate poverty and worsen the quality of forest management[2]. It is in this context that the African Development Bank (AfDB) believes that Africa requires financial resources to address the problem, some of which can be raised by plugging the holes in the illicit trade of natural resources, especially timber[3]. The international criminal police organization (INTERPOL) and the United Nations Environment Programme (UNEP) estimate that natural resources valued in the range of $91-$258 billion are being stolen by criminals every year, depriving countries of revenues and critical development opportunities[4]. Illicit activities include the harvesting, transportation, purchase, and sale of natural resources in violation of national laws. The natural resources considered in this paper are forest products with an emphasis on timber.

Many illegal acts in forestry are perpetrated against communities in Africa. Some of the most common forms of illegal acts committed by timber companies include: harvesting without title (or right); harvesting outside concession boundaries; harvesting in protected areas; failing to respect management plans setting out the geographic scope and technical approach permitted; re-cutting on a concession site; harvesting more than authorized volumes; harvesting species protected by the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES) above the authorized annual quotas; harvesting below the allowed minimum exploitable diameter (MED) rules; unlawfully transporting wood and other forest products; falsification of documents; smuggling; transfer pricing; tax evasion; corruption; wood laundering, illegal industrial processing; ignoring the terms of social responsibility contracts with communities; and false declaration of timber volumes[5]. This extremely concerning catalogue of criminal acts illustrates the range of issues and types of economic and environmental harms being committed. It also gives a hint of the scale and ubiquity of the problems which this paper sets out to explore.

This paper does not examine how to classify such acts or the institutional arrangements that trigger them in the forestry sector but rather identifies the drivers or possible causes, probable incidence, magnitude and impacts as well as identifying some options to curb them. Corruption lies at the heart of the challenge. It enables illicit trade in timber due to its prevalence in many African countries and to tackle illicit trade in timber, corruption must also be confronted. Despite the serious lack of data on illegal activities in the African natural resources sector, efforts are made in this paper to gather evidence from across the forestry sector and to shine a light on activities some would prefer to remain in shade.

Information was sourced from desk reviews of published and grey literature in Africa on the extraction and logging, processing, transportation, and trade in timber. Attempts were made to examine national legal standards (such as FLEGT and CITES) and other market-driven governance systems such as forest certification schemes. International research institutions were consulted about their resources.

The Congo Basin countries were disproportionately referenced because the region formally produces about 80% of the annual total volume of African timber of 6-8 million cubic metres[6]. According to the UN Food and Agriculture Organization, (FAO, 2016) Africa has 624 million hectares (ha) under forest,

[1] *ANRC. 2016. Illicit trade in natural resources in Africa – A forthcoming report from the African Natural Resources Centre. African Development Bank. October. 16 pp.*
[2] *Contreras-Hermosilla A. 2007. Law Compliance in the Forestry Sector An overview of implementation. The World Bank Institute. Washington DC. USA. 47 pp.*
[3] *ANRC. 2016. Illicit trade in natural resources in Africa – A forthcoming report from the African Natural Resources Centre. African Development Bank. October. 16 pp.*
[4] *Nellemann, C. (Editor in Chief); Henriksen, R., Kreilhuber, A., Stewart, D., Kotsovou, M., Raxter, P., Mrema, E., and Barrat, S. (Eds). 2016. The Rise of Environ mental Crime – A growing threat to Natural Resources Peace, Development and Security. A UNEPINTERPOL Rapid Response Assessment. United Nations Environment Programme and RHIPTO Rapid Response–Norwegian Center for Global Analyses, www.rhipto.org*
[5] *Amariei. L. 2005. Legal Compliance in the Forestry Sector. Case study: Cameroon. Final report. 29pp.*
[6] *EIA (Environmental Investigation Agency). 2019a. Toxic trade: Forest crimes in Gabon and the Republic of Congo and the contamination of the US market. EIA, Washington DC. 84 pp.*

which comprises 20.6% of the continent's land area and 15.6% of the world's forest cover. It is estimated that Africa's forest area has declined by about 2.8 million ha between 2010 and 2015, a much higher rate than in any other region in the world, and this has been mainly due to deforestation and forest degradation[7]. The Congo Basin forest covers 186.44 million ha, out of which 27% (7 million ha) are under concession management with countries like Gabon and the Republic of Congo allowing 65% and 63% of their forests as concessions (EIA 2019a).

At the tree species level, rosewood is reported to be the single-most smuggled wildlife product in the world and it is now suffering from increasing scarcity following insatiable demand from the neo-antique furniture industry in Asia. [8] Its exploitation and trade is suffocated with illicit acts, and illegal transactions perpetrated by international criminal or mafia networks of traffickers. This is particularly true for China with an estimated 3,000 rosewood factories across 25 areas in the country, well financed by state owned bank loans worth $75 million[9]. As a result, the extremely high levels of demand for this timber species have led to the unsustainable harvesting of rosewood trees and a thriving illicit trade of their timber.

[7] *AFF 2019. Op. cit.*
[8] *EIA (Environmental Investigation Agency). 2019c. SCHEDULED EXTINCTION. Our Last Chance to Protect the Threatened African Mukula Trees. Environmental Investigation Agency, Inc. 2019. 20 pp.*
[9] *EIA (Environmental Investigation Agency). 2019c. Op. cit.*

Concepts of corruption, governances and their linkages

Over the past five decades, many of the difficulties faced in managing natural resources in Africa have been linked to weaknesses of governance and the absence of effective mechanisms of state[10]. Good governance was defined by the Commission for Africa as the ability of government and public services to create an economic, social, and legal framework that will encourage economic growth and allow poor people to participate in it[11]. Institutionalized corruption, euphemistically called 'informal taxes' is a manifestation of a lack of respect for rules (either formal and informal) of both the corrupter and corrupted. It has signaled a massive failure of 'good' governance and been a leading cause of poverty[12]. Defined as the exercise of power for private gain, corruption ranges from additional payments 'to get things done' in business, to elites engaging in state and power capture or managing to orient systems to ensure their continued personal gain[13]. Where formal regulations are unknown, unclear, or unenforced, corruption can occur, impacting how, when and where transactions occur in forest product value chains.

Corruption within the timber sector can be classified into two types: collusive and non-collusive corruption. Non-collusive corruption is when a bribe is demanded for a legal activity (such as obtaining an exploitation permit), and this effectively increases the cost to the private enterprise or individual[14]. Collusive corruption is when a bribe is paid to government officials to avoid the penalty that should come with a regulatory violation. This bribe is withheld from the public treasury and retained by the government officials and usually both parties benefit from collusive corruption, where for example the bribe 'costs' less than a fine.

Logging and transport of wood within national territories amongst Congo Basin countries by small scale or artisanal loggers is often subject to collusive

[10] *Assembe-Mvondo, S. 2009. State failure and governance in vulnerable states: An assessment of forest law compliance and enforcement in Cameroon. Africa Today 55(3): 85–102.*
[11] *COMMISSION for AFRICA. 2005. Our Common Interest. Report of the Commission for Africa. March. 462 pp.*
[12] *Kaufmann, D., Kraay, A., Mastruzzi, M., 2010. Governance Matters IV Updated Governance Indicators 1996–2009. In: World-Bank (Ed.). Worldwide Governance Indicators (WGI) project, Washington.*
[13] *Cerutti, P.O., Tacconi, L., Lescuyer, G., Nasi, R., 2013. Cameroon's hidden harvest: commercial chainsaw logging, corruption, and livelihoods. Soc. Nat. Resour. 26, 539–553.*
[14] *Smith, J., Obidzinski, K., Subarudi, Suramenggala, I., 2003. Illegal logging, collusive corruption, and fragmented governments in Kalimantan Indonesia. International Forestry Review 5 (3), 293–302.*

corruption[15]. In this form of corruption, government officials overlook violations of the law in return for bribes such as export or transport without permit and logging outside authorized areas. These bribes serve as insurance for small scale loggers to avoid the more severe penalty of violation[16]. Illegal logging by large scale concessions is a common practice and often characterized by logging without management plans, logging in prohibited areas, over logging, and non-payment of fees and taxes[17]. There are multiple points where corruption commonly takes place. Government officials are bribed during the bidding for allocation of logging permits or during harvesting. Forest controllers are bribed to overlook contraventions of logging areas and road control officials are paid off to overlook transport documents subject to tampering. At the point of sale, inspectors can be bribed to overlook the sale of illegal timber or protected species[18]. These different points of opportunity underline the presence of a corruption chain within countries, making it difficult for government policies and laws to be effectively applied due to vested interests from different actors along the chain[19].

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Corruption in the natural resource sectors in most Africa countries has been described as rife and there is increasing conflict over how to control the networks of corruption that cause policy reforms to fail[20]. Logging by small-scale loggers, ineffective governance, collusive corruption, insufficient clarity on property and usufructuary rights, poor institutional frameworks for enforcing laws and policies are among the principal drivers that facilitate illegality in the timber value chain[21]. Other authors see a direct correlation between corruption and the levels of illegal logging and illicit trade in timber products[22] [23]. The authors observe that manifestations of illicit transactions take various forms including: the allocation of forestry concessions; the procurement of legal documentation, including export licenses and customs declarations; the authorization of timber industries where there is insufficient legal timber for their operations; the undermining of the effectiveness of management plans and enforcement operations; and failing to gain approvals for the construction of logging roads[24].

The links between governance, sustainable development and poverty alleviation were made as early as 1997 at the United Nations Development Programme's International Conference on Governance for Sustainable Growth and Equity and subsequently applied to forests[25]. Practical challenges in realizing forest conservation and development goals have increasingly highlighted that the sustainable management of forests and their products pivots on governance. How forests and their products are governed can have far-reaching resource outcomes, depending on who governs and why, the rights and rules applied, all of which have clear implications for the sustainability of livelihoods[26]. Governance refers to public, civil society and private interactions initiated to solve societal problems and create opportunities[27]. It is the way a society organizes itself to make and implement decisions, attempting to achieve mutual understanding, agreement and action and it includes the mechanisms and processes for citizens and groups to articulate their interests, mediate their differences and exercise their legal rights and obligations. These definitions emphasize that governance embraces the decisions and processes that define expectations, grant and exercise power, and verify performance[28].

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[15] *Cerutti, P.O., Tacconi, T., Lescuyer, G. and Nasi, R., 2013. Cameroon's Hidden Harvest: Commercial Chainsaw Logging, Corruption and Livelihoods. Society & Natural Resources 26: 539-553.*

[16] *Cohen, M.A. 1999. Monitoring and enforcement of environmental policy. In: Tietenberg, T. and Folmer, H. (eds). International Yearbook of Environmental and Resource Economics, 3. Edward Elgar Publishers.*

17Hoare, 2015. Op. cit.

[18] *Kishor, N. and Lescuyer, G., 2012. Controlling Illegal Logging in Domestic and International Markets by Harnessing Multilevel Governance Opportunities. International Journal of the Commons 6 (2): 255-270.*

[19] *Treanor NB. 2015. China's Hongmu Consumption Boom: Analysis of the Chinese Rosewood Trade and Links to Illegal Activity in Tropical Forested Countries. Forest Trends Report Series. Forest Trade and Finance. December. 48pp.*

[20] *Hoare, A. 2015. Op. cit.*

[21] *Piabuo SM, Minang PA, Divine Foundjem-Tita D and Tieguhong JC. In Prep. Impact of illegal logging on climate change: Case of timber producing countries in the Congo Basin and Asia.*

[22] *Alemagi, D., & Kozak, R.A. 2010. Illegal logging in Cameroon: Causes and the path forward. Forest Policy and Economics, 12(8), 554-561.,*

[23] *Gore, M. Ratsimbazafy, J. and Lute, L.M. 2013. "Rethinking Corruption in Conservation Crime: Insights from Madagascar." Conservation Letters 6(6): 430–438.*

[24] *Blundell, A. and Harwell, E. 2009. An analysis of corruption in the forestry sector, Transparency International, Berlin.*

[25] *Ros-Tonen, M.A.F., Kusters, K., 2011. Pro-poor governance of non-timber forest products: the need for secure tenure, the rule of law, market access and partnerships. In: Shackleton, S., Mitchell, D., Shackleton, C., Campbell, B., Shanley, P. (Eds.), Nontimber Forest Products in the Global Context. Springer, pp. 189–207*

[26] *Laird, S.A., McLain, R., Wynberg, R.P., 2009. Wild Product Governance: Finding Policies that Work for Non-Timber Forest Products, Policy Brief. People and Plants International, London, p. 16*

[27] *Kooiman, J., Bavinck, M., Jentoff, S., Pullin, R., 2005. Fish for Life. Interactive Governance for Fisheries. Amsterdam University Press, Amsterdam.*

[28] *Tieguhong J.C., Ingram V.J., Mala W.A., Ndoye O., Grouwels S. 2015. How governance impacts non-timber forest product value chains in Cameroon. Forest Policy and Economics. 61(2015): 1-10. http://dx.doi.org/10.1016/j.forpol.2015.08.003*

2.0

Drivers and channels of illicit timber trade

Over the last decade, domestic demand for timber products in Africa has increased enormously, and has been met by the informal sector because of its flexibility and ability to respond quickly to shifting local and national market conditions. Illicit exports of timber to "non-sensitive"[29] markets, those where the products' provenance and legality is of little interest, tends to follow the established export channels for commodities. Specialized criminal syndicates, such as those exporting illicit rosewood, control high-value timber products by taking full advantage of these channels. These supply chains are supported by considerable investments from companies in end-user markets such as China[30]. China now plays a dominant role in the global forest products market fueled by its booming domestic consumption. It has limited forest resources per capita and well-enforced restrictions on domestic harvesting. China's wood industry is reported to be 50% dependent on imported raw materials. In addition, Chinese manufactured wood products have strong demand from the United States (US) and the European Union (EU) which also drives China's increasing need for timber imports, making it the world's largest consumer of tropical timber[31]. As with other illicit natural resources in Africa, illicit trade in African timber is catalyzed by rural poverty, sustained by widespread corruption, and enabled by weak governance and conflicts in places such as eastern Democratic Republic of Congo[32], Guinea Bissau, and the Gambia[33].

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[29] *Hoare (2015) defines sensitive markets as "… those in which there is a strong preference for legal timber owing to the existence of legislation or other policies and/or consumer choice."*

[30] *Putzel L., Assembe-Mvondo S., Bi Ndong L.B., Banioguila R.P., Cerutti P., Tieguhong J.C., Djeukam R., Kabuyaya N., Lescuyer G. and Mala W. 2011. Chinese trade and investment and the forests of the Congo Basin: Synthesis of scoping studies in Cameroon, Democratic Republic of Congo and Gabon. Working Paper 67. CIFOR, Bogor, Indonesia.*

[31] *Huang Wenbin and Sun Xiufang. Und. Tropical Hardwood Flows in China: Case Studies of Rosewood and Okoumé. Forest Trends, ICRAF, CIFOR. 35pp.*

[32] *Assembe Mvondo S. 2009. State Failure and Governance in Vulnerable States: An Assessment of Forest Law Compliance and Enforcement in Cameroon. Africa Today Vol. 55, No. 3: 85-102*

[33] *Treanor NB. 2016. West African countries Come together to address illegal Rosewood trade. Ecosystems Marketplace. A Forest Trends Initiative. https://www.ecosystemmarketplace.com/articles/west-african-countries-come-together-guinea-bissau-address-illegal-rosewood-trade-improve-forest-governance/*

3.0

Incidences of illicit timber production and trade in Africa

The illicit timber trade affects all African countries and the products traded vary depending on locally available resources. In countries with significant forests (such as Liberia, Côte d'Ivoire, Nigeria, Cameroon, Kenya, and Tanzania) the spectacular growth of internal demand for timber has stimulated a small-scale illicit sawmill industry. In these countries, the illicit production and trade of sawn timber and charcoal constitute a major part of national forest sector activity. Small-scale logging, where illegal production is rife, accounts for 50%, 50%, 70% and 90% of the annual wood harvest for Cameroon, Uganda, Ghana, and the Democratic Republic of Congo (DRC) respectively[34]. Reported figures for Equatorial Guinea, Gabon, the Republic of Congo, and Liberia stand at 50%, 70%, 70%, and 80% respectively[35]. From these statistics, it could be reasonable to assume that illicit activity in timber production in Africa oscillate between 50% and 90% depending on the country. The ever-growing informal sector is a principal driver of illegal logging within the Congo Basin[36]. For example, in the DRC where small loggers are the main drivers of illegal logging, about 8000 of them are responsible for harvesting 1.5 to 2.4 million m^3 per year[37]. Illegal logging by private individuals is equally rampant, accounting for more than 200,000 m^3 annually in Cameroon[38].

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[34] *Lescuyer, G., Ndotit, S., Ndong, L.B.B., Tsanga, R. and Cerutti, P.O., 2014. Policy Options for Improved Integration of Domestic Timber Markets under the Voluntary Partnership Agreement (VPA) Regime in Gabon. CIFOR Infobrief No. 82. Bogor: Centre for International Research on Forestry (CIFOR).*

[35] *Hoare, A. (2015). Tackling Illegal Logging and the Related Trade: What Progress and Where Next? Chatham House, London. https://www.chathamhouse.org//node/18090.*

[36] *Jum, C., & Oyono, P. R. 2005. Building collaboration through action research: the case of Ottotomo forest reserve in Cameroon. International Forestry Review, 7(1), 37-43. http://dx.doi.org/10.1505/ifor.7.1.37.64160*

[37] *Djiré, A. 2003. Le secteur informel du bois d'œuvre. Rapport d'appui à la revue économique du secteur forestier en RDC. Rapport technique, CIRAD. Ministère des Finances, République Démocratique du Congo. 42p.*

Exports of logged timber from small-scale logging vary from one country to another, over time and in response to policy, domestic, regional and world market requirements. In Cameroon, 92% of illegal logged timber by artisanal loggers was sold domestically in 2009, but in the Republic of Congo, the volume of artisanal logged timber (99,000 m^3) was 6.5% higher than exported timber[39]. In the DRC informal logging was 13 times higher than timber logged legally in 2012, with 85% sold in the domestic market[40]. In Liberia, some authors estimated the level of illegal logging by informal chainsaw millers at approximately 100%, suggesting that irrespective of the country, artisanal logging is largely synonymous with illegal logging[41]. The efforts of smallholder farmers converting forest to agriculture has also been blamed as one of the principal drivers of illegal logging[42].

4.0

Impacts of illicit trade in timber

Strong trade in illegally logged timber has driven illegal logging in producer countries with an estimated 83% of China's timber imports from Africa having a high risk of illegality[43]. This is highly detrimental to the region because timber exports to China have increased by 60% from $652 million in 2009 to $1.041 billion in 2017, making it the second largest commodity exported from the region after oil[44].

[38] *Amariei. L. 2005. Legal Compliance in the Forestry Sector Case study: Cameroon. Final report. 29pp.*

[39] *Cerutti, P.O., Lescuyer, G., 2011. The Domestic Market for Small-Scale Chainsaw Milling in Cameroon: Present Situation, Opportunities and Challenges. CIFOR, Bogor (Indonesia) (52 pp. Available online: http://www.cifor.org/publications/pdf_files/OccPapers/OP-61. pdf; accessed on December 14th, 2017).*

[40] *Lescuyer, G., Ndotit, S., Ndong, L.B.B., Tsanga, R. and Cerutti, P.O., 2014. Policy Options for Improved Integration of Domestic Timber Markets under the Voluntary Partnership Agreement (VPA) Regime in Gabon. CIFOR Infobrief No. 82. Bogor: Centre for International Research on Forestry (CIFOR).*

[41] *Lescuyer, G., Ndotit, S., Ndong, L.B.B., Tsanga, R. and Cerutti, P.O., 2014. Policy Options for Improved Integration of Domestic Timber Markets under the Voluntary Partnership Agreement (VPA) Regime in Gabon. CIFOR Infobrief No. 82. Bogor: Centre for International Research on Forestry (CIFOR).*

[42] *Godar, J., Gardner, T.A., Tizado, E. J. and Pacheco, P., 2014. Actor-specifc contributions to the deforestation slowdown in the Brazilian Amazon. Proceedings of the National Academy of Sciences of the United States of America 111(43):15591-6.*

[43] *Hoare, A. 2015. Tackling Illegal Logging and the Related Trade: What Progress and Where Next? Chatham House, London. https://www.chathamhouse.org//node/18090.*

[44] *EIA (Environmental Investigation Agency), Inc. 2019. Op. Cit.*

Illegal loggers have little compunction about unsustainable practices or violation of laws, which can have serious negative implications for forests and community livelihoods[45]. Moreover, it is well documented in literature that forest crimes also include broader sector operations such as the transportation of forest products, industrial processing, and trade. Illicit activity is also known to distort market prices, depressing world prices for wood by 7 - 16% as well as supporting civil unrest[46].

Generally, illicit activities weaken state institutions and their capacity to conduct the tasks of monitoring state of its forests, enforcing forest law, detecting, and prosecuting offenders and effective regulation of the sustainable use of forest resources cannot be accomplished[47]. This has serious economic, social, and environmental impacts, some of which are captured below.

4.1 Economic impacts

Illegal loggers have little compunction about unsustainable practices or violation of laws, which can have serious negative implications for forests and community livelihoods.

The forest sector contributes an estimated $600 billion to the global economy employing over 54 million people. However, 75% of this workforce is employed informally, making it difficult for governments to support and regulate these workers, for example by limiting unsustainable activities and to collect taxes[48]. The failure to pay taxes and duties generates a considerable loss for national public finances, especially given the scale of operations. Global Witness reports that as much as 90% of potential tax revenues from logging are lost in the DRC because of illegal logging[49]. Indeed, the forestry sector is infamous for economic leakages associated with illicit acts and transactions. For example, in 2015, Interpol estimated that the annual financial losses from the illicit timber trade globally were about $100 billion, representing between 10% and 30% of all timber traded globally[50]. Based on this data, the 2014 Africa Progress Panel estimated the losses incurred as a result of the African trade at $17 billion,

[45] *Mayers J, Nguiffo S and Assembe-Mvondo S. 2019. China in Cameroon's forests: a review of issues and progress for livelihoods and sustainability. Research report. IIED, London.*

46Achanyi-Fontem J. 2010. Corruption in the forestry sector and illegal logging. Tuesday, May 11. http://camlinknews.blogspot.com/2010/05/corruption-in-forestry-sector-and.html

[47] *Achanyi-Fontem J. 2010. Op. cit.*

[48] *Chatham House. 2020.*

[49] *Global Witness. 2013. Logging in the shadow: how vested interests abuse shadow permits to evade forest sector reform; an analysis of recent trends in Cameroon, Ghana the Democratic Republic of Congo and Liberia, Global Witness, London.*

[50] *International Criminal Police Organization (Interpol). 2015. Environmental Crime and its Convergence with other Serious Crimes. Document 2015/999/OEC/ENS/SLO, INTERPOL, Lyon.*

which approximates to 1% of continental GDP[51]. Other estimates suggest the total loss to illegal timber trade in Africa is at $13 billion[52]. Whatever the exact figure, the scale of loss to the citizens of the continent, which could otherwise support their needs, is staggering.

At the country level, the Chinese owned Dejia Group's operations provides a concrete example of the institutional illegal exploitation currently underway. The Dejia Group's business is based on two pillars: the unrestricted exploitation of over 1.5 million hectares of forest in the Republic of Congo and Gabon through multi-scale bribes; and the establishment of a plethora of offshore companies in the three principal world timber markets (China, the EU, and the US)[53]. The following activities have been documented:

Illegal harvesting, overharvesting and harvesting of unauthorized species: The Lebama Forest Management Unit of 100,000+ hectares in the Republic of Congo is said to be an illegally allocated concession to the company that has over-harvested 85,000 m^3 of wood. made up of 46 different timber species, equivalent to 15,000 trees, between 2013 and 2016[54].

Making export records wildly inaccurate by exporting over 100,000 logs, worth over $80 million, in excess of its Congolese log export quota between 2013 and 2016.

Diverting payments of between $3 and $6.7 million per year in corporate tax from Gabon and the Republic of Congo between 2013 to 2016.

In contravention of national law and the agreement signed between the Republic of Congo and the company, exported 87% of its production between 2013 and 2016 as unprocessed round logs[55] flouting the law that a maximum of 15% is permitted.

It is important to recognize that with better data collection and reporting, other timber companies in the region will also be found to be responsible for equally negative illegal activities. For example, in Cameroon, systematic corruption is reported to undermine the integrity of the small-permit allocation process, with informal approaches for allocating resources being the norm rather than the exception. Cameroon's total timber production is estimated at about four million cubic meters, double the amount the formal

[51] At 2011 prices and exchange rates.
[52] ANRC. 2016. Op. Cit.
[53] EIA (Environmental Investigation Agency), Inc. 2019. Toxic trade: Forest crimes in Gabon and the Republic of Congo and the contamination of the US market. EIA, Washington DC. 84 pp.
[54] EIA (Environmental Investigation Agency), Inc. 2019. Opt. Cit.
[55] EIA (Environmental Investigation Agency), Inc. 2019. Opt. Cit.

sector declares. Illicit sawmills process most of this illicit production and make unofficial annual payments amounting to about $6 million. Taken collectively, illicit trade results in an annual loss of $525 million and is roughly equivalent to 2.25% of the entire GDP of Cameroon. The share of GDP from forestry resources that is omitted in official statistics may undermine the worth of the sector and increase the risks of official investments and management efforts in the sector being reduced. Elsewhere in Cameroon an indication of the scale of the corruption is given. A non-timber forest product known as okok (Gnetum spp.) was investigated in detail and it was documented that of 18,368 financial transactions recorded by 12 traders over a year, 81% were bribes, representing 34% of the trader's costs[56].

Cameroon is not alone in seeing a loss of economic rents associated with illicit timber production and trade. In Liberia, the annual revenue generated by chainsaw milling alone is estimated to be in the region of $31–$41 million, or about 3–4% of GDP[57]. In Guinea Bissau, between 2012 and 2014, unchecked and illicit trade led to the export of nearly 94,000 m^3 of rosewood to China, valued at $65.3 billion[58]. Trade data discrepancies are also indicative of illegal

[56] Tieguhong J.C., Ingram V.J., Mala W.A., Ndoye O., Grouwels S. 2015. How governance impacts non-timber forest product value chains in Cameroon. Forest Policy and Economics. 61(2015): 1-10. http://dx.doi.org/10.1016/j.forpol.2015.08.003
[57] USAID (United States Agency for International Development). 2015. Gap Analysis of Targeted Domestic Natural Resource Markets in Liberia. Prepared by the USDA Forest Service Office of International Programs.
58 Treanor NB. 2015. China's Hongmu Consumption Boom: Analysis of the Chinese Rose

activity because the lack of comprehensive and reliable data seriously hinders the government's efforts to monitor the sector and the timber trade[59].

4.2. Social impacts

Forests make an enormous contribution to the economic development of forest-dependent communities: around 1.6 billion people rely on forests for their livelihoods including around 70 million indigenous people[60]. The impacts of the illicit production and trade of forest products on social development and local welfare are yet to be fully assessed, although there some evidence linked to the sustainability of the livelihoods of local communities.

On the one hand, illicit trade provides short-term employment and income to local populations that exceed what could be generated from subsistence farming; on the other, it is disruptive to communities and leads to the relocation of villages, which, in turn, creates social insecurity and long-term environmental damage.

Illicit trade sows civil unrest. For example, 95% of rosewood recorded as coming from the Gambia originates in Senegal, and its harvest there contributes funds to a separatist movement along the nation's southern border. According to the International Criminal Police Organisation (Interpol), in areas such as eastern DRC, social and economic dynamics push populations to exploit timber resources, often known as 'conflict timber' amidst increased criminality. There, militias have driven villagers into refugee camps, and now exploit local forestry habitats native to lowland gorillas to make charcoal to sell to refugees. One terrorist group operating in several East African countries is estimated to generate between $38 million to $56 million annually from their illegal trade in charcoal.

wood Trade and Links to Illegal Activity in Tropical Forested Countries. Forest Trends Report Series. Forest Trade and Finance. December. 48pp.

[59] Hoare A. 2015. Op. Cit.

[60] Chatham House. 2020.

It is estimated that militia and terrorist groups in and around nations with ongoing conflict earn more than $110 million annually through illicit trade in charcoal production and trading[61].

Transnational crime syndicates that govern illicit trade in timber continue to exploit and export valuable rosewood to China despite all producer countries having solid legal frameworks and outright bans in place in Madagascar, Gambia, and Senegal to attempt to conserve rosewood species[62]. For instance, between January 2015 and June 2019 Ghana exported close to $300 million worth of rosewood to China, which is 542,085 tons and representing six million trees, despite repeated bans on harvesting, transport, and export[63]. The syndicates use corruption and cronyism as well as coercive force to allow international rules to be bypassed and domestic bans flouted. Law enforcement officers have been killed, with reports of more than 150 people murdered in recent years because they were trying to enforce laws related to rosewood[64].

These crimes are typically linked to the African timber trade with China. Chinese-linked trade and investments have major implications for forests and community livelihoods, with unsustainable practices from some companies and the unidirectional flow of harvested timber. For example, it is reported that only 1% of malagasy rosewood now remains in the country, as 98% has already been exported to China[65]. Weak implementation of the national and international regulations applying to Chinese-linked investments, and a lack of dialogue between Chinese and national actors, exacerbate these effects[66]. This leads to the deterioration in the respect of law as society's trust in the state and its representatives is eroded (including police, judges, officials, politicians) , creating difficulties in governing the society[67].

[61] International Criminal Police Organization / World Bank. (2009). Chainsaw project. An INTERPOL perspective on law enforcement in illegal logging, INTERPOL, Lyon.

[62] Treanor NB. 2016. West African countries Come together to address illegal Rosewood trade. Ecosystems Marketplace. A Forest Trends Initiative. https://www.ecosystemmarketplace.com/articles/west-african-countries-come-together-guinea-bissau-address-illegal-rosewood-trade-improve-forest-governance/

[63] EIA 2019b. BAN-BOOZLED How corruption and collusion fuel illegal rosewood trade in Ghana. Environmental Investigation Agency, Inc. 2019.

[64] Treanor NB. 2015. China's Hongmu Consumption Boom: Analysis of the Chinese Rosewood Trade and Links to Illegal Activity in Tropical Forested Countries. Forest Trends Report Series. Forest Trade and Finance. December. 48pp.

[65] Treanor NB. 2016. West African countries Come together to address illegal Rosewood trade. Ecosystems Marketplace. A Forest Trends Initiative. https://www.ecosystemmarketplace.com/articles/west-african-countries-come-together-guinea-bissau-address-illegal-rosewood-trade-improve-forest-governance/

[66] Mayers, J, Nguiffo, S and Assembe-Mvondo, S. 2019. China in Cameroon's forests: a review of issues and progress for livelihoods and sustainability. Research report. IIED, London.

[67] By between 7% and 16%, depending on the product, as estimated by the American Forest and Paper Association.

4.3. Environmental impacts

Trade in illegally logged timber has a principal cause of illegal logging in producer countries, with as much as 83% of China's import of timber from Africa at high risk of illegality[68]. About 2.8 million ha of forest are felled illegally each year[69]. In the example over of the Dejia group's activities, over 100,000 ha of forest land was illegally obtained in the Republic of the Congo, with 46 different species over-harvested accounting for 85,000 cubic metres and equivalent to 15,000 trees between 2013 and 2016[70].

The wanton removal and trade of these trees threatens the Congo Basin's ability to perform core environmental services such as climate change mitigation. Recent research results from panel regression testing revealed the significant impact of illegal logging, corruption and government effectiveness on climate change amongst the Congo Basin countries[71]. For instance, unlike other major tropical forests, the Congo Basin forests generate between 75-95% of the region's rainfall through evaporation and evapotranspiration[72]. However, illegal felling of timber contributes significantly to an increase of carbon emissions in Africa, representing 30% of annual emissions, which means that climate change mitigation can be improved significantly by reducing illegal logging[73] [74]. Forest degradation and foregone removals have recently been estimated to increase the carbon impacts of intact forest loss by up to 626%[75]. This data suggests tackling illegal trade in timber could be one of the biggest contributions to climate impact many countries could make.

Illegal logging adversely affects forests and their biodiversity as well as undermining their unique role as the provider of the myriad of ecosystem services[76] and sustaining biochemical recycling and plant growth[77]. Emissions from annual tropical tree cover loss have an unparalleled impact on climate change. Between 2014 and 2018 they were 4.7 gigatons of CO_2 per year – more than the entire European Union's 2017 greenhouse gases emissions[78].

Overall, illicit trade and demand from Asia, especially China, have been blamed for threatening unique and fragile ecosystems such as those in Madagascar where 90% of all plant and animal species found on the island are endemic. The exploitation and illicit trade in precious timber bring threats, especially to ebonies (Diospyros spp.), rosewoods (Pterocarpus erinaceus) and palisanders (Dalbergia spp.) to feed hundreds of factories specializing in manufacturing antique-style furniture[79]. The Madagascar experience holds true for many West African countries too, (including Burkina Faso, Côte d'Ivoire, Ghana, Guinea-Bissau, Guinea, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo) with China`s rosewood imports from the region having increased by an unparalleled 700% between 2010 and 2014. The illegal exploitation and trade in these species has led to widespread deforestation and degradation in fragile ecosystems in the region, affecting environmental services as well as the livelihoods of forest-dependent populations, fuel, and medicines[80]. This is especially relevant for the rosewood species that are slow-growing hardwood trees that will take many years to replace.

However, illegal felling of timber contributes significantly to an increase of carbon emissions in Africa, representing 30% of annual emissions, which means that climate change mitigation can be improved significantly by reducing illegal logging

In Zambia, a handful of very high-profile figures are reported to be at the center of orchestrating and facilitating massive trafficking of illicit rosewood trees to the brink of commercial extinction, effectively plundering and devastating Zambia's

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[68] *Hoare, A. (2015). Tackling Illegal Logging and the Related Trade: What Progress and Where Next? Chatham House, London. https://www.chathamhouse.org//node/18090.*
[69] *FAO 2016. Global Forest Resources Assessment 2015. How are the world's forests changing? Second edition. Rome.*
[70] *EIA (Environmental Investigation Agency), Inc. 2019. Op. cit.*
[71] *Piabuo SM, Minang PA, Divine Foundjem-Tita D and Tieguhong JC. In Prep. Impact of illegal logging on climate change: Case of timber producing countries in the Congo Basin and Asia.*
[72] *EIA (Environmental Investigation Agency), Inc. 2019. Op. cit.*
[73] *Pearson, T., Brown, S., Murray, L., & Sidman, G. (2017). Greenhouse gas emissions from tropical forest degradation: an underestimated source. Carbon balance and management, 12(1), 3.*
[74] *Pearson, T., Brown, S., Murray, L., & Sidman, G. (2017). Greenhouse gas emissions from tropical forest degradation: an underestimated source. Carbon balance and management, 12(1), 3.*
[75] *Maxwell S.L., Evans T.D., Watson J.E.M, Malhi Y. et al. 2019. Degradation and forgone removals increase the carbon impact of intact forest loss by 626%. Science Advances 5(10):eaax2546. DOI: 10.1126/sciadv.aax2546*
[76] *Gibson, L., Lee, T. M., Koh, L. P., Brook, B. W., Gardner, T. A., Barlow, J., Peres, C.A. et al., 2011. Primary forests are irreplaceable for sustaining tropical biodiversity. Nature 478: 378-381.*
[77] *Edwards, F. A., Edwards, D. P., Larsen, T. H., Hsu, W. W., Benedick, S., Chung, A. and Hamer, K.C., 2014. Does logging and forest conversion to oil palm agriculture alter functional diversity in a biodiversity hotspot? Animal Conservation 17: 163-173.*
[78] *Chatham House. 2020. Why Tackling Illegal Logging is Important Adelaide Glover, 3 March 2020 https://forestgovernance.chathamhouse.org/publications/why-tackling-illegal-logging-is-important*
[79] *EIA. 2020. "Investigating illegal harvest and trade in precious woods and monitoring the implementation of the international embargo on rosewood". https://eia-global.org/subinitiatives/madagascar*
[80] *Treanor NB. 2015. China's Hongmu Consumption Boom: Analysis of the Chinese Rosewood Trade and Links to Illegal Activity in Tropical Forested Countries. Forest Trends Report Series. Forest Trade and Finance. December. 48pp.*

vulnerable forests and threatening communities' livelihoods[81]. Chinese log imports from Zambia to China boomed from a total value of $2,528,619 in 2013 to $62,595,02 in 2018. The total volume in 2018 was 63,498 tons (equivalent to approximately 102,172 cubic meters), 90% of which was mukula rosewood[82] or approximately the national annual production of rosewood in Zambia at 110,000 cubic meters and affecting between 90,000 and 150,000 hectares of forested land[83].

Even in Liberia which is considered to still have the largest tropical forests in West Africa, net forest depletion as a percentage of gross national income, and which is a measure of unsustainable forest use, increased from 0.5% in 2005 to 32% in 2015[84] and the annual deforestation (forest loss) rate is estimated at 0.46% over the same period[85]. This trend is gloomy and particularly concerning given the high importance given to forest preservation in the global sustainable development agenda. According to some authors, there has been little progress made in ending the loss of natural forests, with future projections even showing an increasing trend. It is even reported that between 2014 and 2018, after the New York Declaration on Forests was endorsed with the aim to halt global forest loss, average annual tropical forest loss accelerated by 44%[86].

Most authors argue that the continuous growth of Chinese influence in the global timber market has a major role to play in exacerbating the issues[87]. From 1997 to 2012, Chinese imports of forest products increased from 36 million m^3 to 159 million m^3 roundwood equivalent (RWE)[88]. While the global economic downturn affected consumption in many countries, China's trade with Africa remained mostly unaffected. According to China's customs agency, trade between China and African nations, which stood at $40 billion in 2005,

[81] *EIA. 2019c. SCHEDULED EXTINCTION. Our Last Chance to Protect the Threatened African Mukula Trees. Environmental Investigation Agency, Inc. 2019. 20 pp.*
[82] *EIA (Environmental Investigation Agency). 2019c. SCHEDULED EXTINCTION. Our Last Chance to Protect the Threatened African Mukula Trees. Environmental Investigation Agency, Inc. 2019. 20 pp.*
[83] *Cerutti, P. O. et al., 2018. Informality, global capital, rural development and the environment: Mukula (rosewood) trade between China and Zambia. Research Report. London/Lusaka, UK/ Zambia: IIED/CIFOR.*
[84] *World Development Indicators (database). Liberia, 2015. World Bank, Washington, DC.*
[85] *Winrock International. 2016. Development of Liberia's REDD+ Reference Level: Final Report for Republic of Liberia Forestry Development Authority. Arlington, VA: Winrock International.*
[86] *Chatham House. 2020. Why Tackling Illegal Logging is Important Adelaide Glover, 3 March 2020 https://forestgovernance.chathamhouse.org/publications/why-tackling-illegal-logging-is-important*
[87] *Cerutti P.O., Assembe -Mvondo S., German L. and Putzel L. 2011. Is China unique? Exploring the behaviour of Chinese and European firms in the Cameroonian logging sector. International Forestry Review Vol.13(1), 2011*
[88] *Xiufang Sun. 2014. Forest Products Trade between China and Africa: An Analysis of Import and Export Statistics. Forest Trends Report Series. April. 60PP.*

grew by 295% to $198 billion in 2012[89]. Due to the high quality of Africa`s timber, its share of China's tropical hardwood log and lumber imports by value (13.6%) is more than double its share by volume (6.5%). Regionally, more than one third of China's imports came from Central Africa, possibly due to consumer preference for endemic tree species such as okoumé. At the country level, China is Cameroon's biggest timber buyer and prefers raw logs, which accounts for around 85% of the total volume of timber exported to China[90].

5.0

Efforts at curbing illicit timber trade

Several measures have been taken at national, regional, and international levels to curb illicit logging and illegal timber trade. These measures can be classified in five main categories of approach: policy, involuntary market tools, international cooperation, statutory controls, and the use of international instruments.

5.1. Policy

Policy measures to curb illegal logging and trade in timber and timber products have been undertaken at national and international levels.

[89] *Mayers, J, Nguiffo, S and Assembe-Mvondo, S. 2019. China in Cameroon's forests: a review of issues and progress for livelihoods and sustainability. Research report. IIED, London.*
[90] *Mayers, J, Nguiffo, S and Assembe-Mvondo, S. 2019. China in Cameroon's forests: a review of issues and progress for livelihoods and sustainability. Research report. IIED, London.*

At an international level, in May 1998 the G8 launched a forests action program aimed at eliminating illegal logging and trade in timber. In 2001, countries involved in the production and trade of timber convened and adopted 50 actions at the national level and 20 regional actions to curb illegal logging and trade[91]. Since then, illicit timber production, illicit trade, and the role of consumers in international markets in driving the trade have attracted further attention from national governments, NGOs and multilateral organizations.

The response of most African governments has been to reform their policy frameworks and governance systems to tackle these issues. Indeed, in most African timber producing countries, forestry policy frameworks have been reformed over the last 15 years, with illicit production and trade identified as major issues. In many cases, principles and modalities for better governance have been formally asserted, such as in Cameroon, the Congo and the DRC, among the biggest producers of forest products. The principal policy and administrative measures that are slated for development include:

i. stronger controls on bribery, accompanied by more severe punishment;
ii. better monitoring of wood harvesting and of informal sector activities;
iii. greater inclusion of the private sector and civil society in forestry
iv. decision making;
v. development of community-based forestry management programs.

The evolution of these policy reforms and the measures required to implement them are a continual struggle. Issues are often compounded by inconsistent and sometimes contradictory regulatory environments, weak administrative capacity, and even judicial corruption undermining the role of the courts and justice systems in the countries[92]. An assessment of the impacts of these policy reforms is beyond the scope of this paper, but the general perception of the authors is that little progress has been made on the ground despite extensive discussion and expenditure.

[91] *Sizer, N.C. 2001. Cooperation makes a real difference. The Jakarta Post, September 18.*
[92] *Carodenuto, S., Cerruti, P.O., 2014. Forest law enforcement, governance and trade (FLEGT) in Cameroon: perceived private sector benefits from VPA implementation. For. Policy Econ. 48, 55–62*

5.2. Involuntary market tools

A range of voluntary forest certification schemes (FCSs) have emerged globally with the dual objective of improving governance in producer countries and raising consumer awareness of legally and sustainably produced wood in key markets. Certification is a procedure through which a third party provides an assurance and eventual market labelling that a product, process or service conforms to specified standards, based on auditing the production to agreed procedures[93]. Certification encourages policy changes through ethical trade rather than central or local power and uses market expectation and pressure rather than regulatory compliance as an enforcement mechanism[94].

In response to the expectations of international markets, environmental NGOs and donors about the need for effective management and good governance in the forestry sector, two international certification schemes that have developed footprints in Africa are the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC)[95]. These schemes promote environmentally appropriate, economically viable and socially beneficial forest management as well as transparency and good governance. Their implementation has led to the emergence of multi-stakeholder platforms that function as mechanisms of improved 'social exchanges' for reducing conflicts between logging companies and local communities, as well as providing the social requirements for forest law enforcement[96]. Forest certification also gives consumers a credible guarantee to meet their expectation that the product comes from forests managed in a way that is environmentally responsible, socially beneficial, and economically viable[97] and that these claims are audited by an independent third party, minimizing issues of corruption which are so prevalent elsewhere.

[93] *Nussbaum, R. and M. Simula, 2005. The Forest Certification Handbook (Second Edition). Earthscan, London, UK.*
[94] *Muthoo, M.K., 2012. Forest Certification and Green Economy. Unasylva 239:17-23.*
[95] *Teketay, D., M. Mbolo, S. Kalonga and A. Olivier, 2016. Forest Certification in Africa: Achievements, Challenges and Opportunities. AFF, Nairobi, Kenya.*
[96] *Tsanga R, G. Lescuyer and P.O. Cerutti. 2014. What is the role for forest certification in improving relationships between logging companies and communities? Lessons from FSC in Cameroon. International Forestry Review Vol.16(1), 2014*
[97] *Teketay, D., M. Mbolo, S. Kalonga and A. Olivier, 2016. Forest Certification in Africa: Achievements, Challenges and Opportunities. AFF, Nairobi, Kenya.*

As of October 2017, the total area of forests certified by forest certification schemes in Africa was 7.7 million ha[98] by FSC and 7.61 million ha by PEFC[99]. However, the area of certified forests in Africa represents only 1.5% of the total area of forests certified worldwide by both FSC and PEFC (about 500 million ha). The establishment and implementation of standards, the verification of legality, chains of custody, ecolabelling, and trademarks are applied to promote the sustainable management, conservation, and development of forests in a holistic manner without compromising the rights, resources or requirements of present and future generations[100].

In addition, the African Eco-Labelling Mechanism (AEM) is being developed as an African regional certification scheme while two Pan-African FCSs, namely Pan-African Forest Certification (PAFC) Gabon and PAFC Cameroon, are also being developed as national FCSs. These attempts are all geared at ensuring sustainable forest management and legality in both production and commercial operations. However, under pressure from EU regulation, newcomers to forest certification drive tend to opt for legal verification rather than sustainability certification, knowing that legal compliance does not always equate to sustainability. For example, legally sourced timber may come from forests that are unsustainably managed suggesting the need to improve existing certification schemes.

5.3. International, regional, and national instruments

Globally there are many developments and environmental initiatives that come from the three Rio conventions: the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD), in addition to the UN's Forum on Forests International Arrangement on Forests (IAF) and the Sustainable Development Goals (SDGs) which include managing forest resources sustainably as part of SDG 15. Other global initiatives important to the forestry sector as well as to trees outside forests are the Paris Agreement, Land Degradation Neutrality, the Aichi Targets, the National Development Contributions (NDCs) and discussions on the green and blue economy. More specific initiatives to forests and trees outside forests include the Reducing Emissions from Deforestation and Forest Degradation (REDD+) platform, the Clean Development Mechanism (CDM), the Bonn Challenge, the New York Declaration on Forests, and the International Arrangements on Forests (IAF)[101].

[98] FSC, 2017. FSC Facts & Figures. Forest Stewardship Council, Bonn, Germany.
[99] PEFC, 2017. PEFC Global Statistics: SFM & CoC Certification. PEFC, Geneva, Switzerland.
[100] Teketay, D., 2015. Forest Certification in Africa. AFF, Nairobi, Kenya.
[101] AFF, 2019. The State of Forestry in Africa: Opportunities and Challenges. African Forest Forum, Nairobi Kenya. 186 pp.

At the pan-African level, examples of continental initiatives include the African Forest Landscape Restoration Initiative (AFR100), the Comprehensive Africa Agriculture Development Programme (CAADP), the African Union (AU)'s Agenda 2063, and the AU Sustainable Forest Management Programme (SFMP) for Africa. A key pan-African policy structure was inaugurated at the African Union Assembly in Malabo, Equatorial Guinea, in June 2014, when Heads of State and Government directed the AU Commission (AUC), in collaboration with all African Ministers responsible for forestry and energy, to put in place a Framework for Sustainable Forest Management Programme in Africa. This marked the recognition of the importance of sustainable forest management at the highest political and governance levels on the continent. The COMIFAC sub-regional agreement on forestry control in Central Africa and the Economic Commission of Central African States (ECCAS) network of parliamentarians for the sustainable management of forest ecosystems of Central Africa and the Zanzibar Declaration on Illegal Trade of Timber and Other Forest Products also constitute significant and commendable efforts[102].

With the aim of dismantling the criminal networks involved in the illicit timber trade in West Africa, INTERPOL coordinated `Operation Log`, an operation to address such illicit trade in products such as the West African Rosewood (Pterocarpus erinaceus). This operation raised political awareness about the quantity of illegal trade of rosewood sourced from the region, resulting in

[102] Signed at the World Forestry Congress in Durban in September 2015

Senegal requesting the inclusion of Pterocarpus erinaceus in CITES Appendix II. Nine West Africa countries (Benin, Burkina Faso, Cote d'Ivoire, Gambia, Ghana, Mali, Mauritania, Senegal, and Togo) participated in this operation which resulted in the seizure of more than $216 million in illegally harvested rosewood and other timber species, with 44 individuals arrested and the identification of key regional trade routes used by criminal networks to traffic illegally rosewood[103].

At the national level, forestry policies and legislation emphasize the importance of better management and use of resources. At the sub-regional level, the regional economic communities (RECs) have policies specific to the forestry sector, or policies in the larger environment sector including forestry which also advocate for sustainable management and use of forests. Examples include the "Convergence Plan for the Sustainable Management and Conservation of Forest Ecosystems in West Africa" for ECOWAS countries, the East African Community Forests Management and Protection Act, the SADC Protocol on Forestry, and the Convergence Plan of the Central African Forest Commission (COMIFAC). All these initiatives target improvements in sustainable forest management, processing and trade through better monitoring and mainstreaming into national policies, plans and activities[104].

5.4. Statutory controls and international co-operation

The World Bank Forest Law Enforcement and Governance (FLEG) initiatives emerged in 2003 as the first substantive response by the international community to limit the illicit trade of forest products. Implemented by governments with assistance from donors and international agencies, FLEG addresses international cooperation and stakeholder inclusion as a basis for selecting the right technical and policy mechanisms to fight illicit trade in timber products.

As part of this worldwide program, the African Forest Law Enforcement and Governance (AFLEG) convened a series of ministerial conferences (the first in 2003 in Yaoundé) where the situation and potential remedies were considered within the broader context of the New Partnership for Africa's Development (NEPAD) process. These discussions highlighted the importance of: engaging substantively with communities and other stakeholders, the function of NGOs as important agents in raising awareness of the issues and improving harmonization of legislation and policies across the continent.

These priorities were reaffirmed at the summit of Central African Heads of State held in Brazzaville in 2005 and resulted in the publication of the Plan of Convergence of the Central African countries. The plan provides guidelines to governments for harmonizing policy in their fight against illicit trade. The most significant achievements of AFLEG have been: increased awareness of the causes and impacts of forest crime, sharing experiences between affected countries, developing better information-sharing networks and incorporating illegal logging sensitivity into regional processes.

The FLEG framework catalyzed the development of the European Union Forest Law Enforcement Governance and Trade (EU-FLEGT) mechanism and the Lacey Act policies practiced in the EU and USA, respectively. These two mechanisms are known to have contributed significantly to reducing illicit timber trade in some countries but unfortunately far less so in others[105]. Seven countries currently have Voluntary Partnership Agreements (VPA) with the EU, including the four African states of Ghana, Cameroon, the Republic of Congo, and the Central African Republic. Negotiations to establish VPAs are underway between the EU and Gabon, the Democratic Republic of Congo, Liberia and Côte d'Ivoire. Despite high expectations, the FLEGT program is said to fall short of adequately responding to proposed strategies such as the EU eco-label that was supposed to give greater visibility to the process and to financial institutions to embrace due diligence procedures and associated money-laundering directives. In most countries, setting up a simple traceability system has been difficult[106], jeopardizing the extensive implementation of the FLEGT agenda in producer countries. Notwithstanding this challenge, the FLEGT-VPA process is being adapted to deal with domestic timber markets in producer countries currently dominated by timber from artisanal loggers,

[103] Treanor NB. 2015. China's Hongmu Consumption Boom: Analysis of the Chinese Rosewood Trade and Links to Illegal Activity in Tropical Forested Countries. Forest Trends Report Series. Forest Trade and Finance. December. 48pp.

[104] AFF, 2019. The State of Forestry in Africa: Opportunities and Challenges. African Forest Forum, Nairobi Kenya. 186 pp.

[105] Carodenuto, S., Cerruti, P.O., 2014. Forest law enforcement, governance and trade (FLEGT) in Cameroon: perceived private sector benefits from VPA implementation. For. Policy Econ. 48, 55–62

[106] Carodenuto, S., Cerruti, P.O., 2014. Forest law enforcement, governance and trade (FLEGT) in Cameroon: perceived private sector benefits from VPA implementation. For. Policy Econ. 48, 55–62

who enable illicit trade[107]. In addition, most timber producing countries are engaged in REDD+ programmes and therefore being incentivized to manage forests with results-based payments for actions to remove or reduce emissions due to deforestation and forest degradation. The question remains why these multitude of initiatives are failing to create the traction to achieve real impact.

6.0 Challenges and opportunities

Efforts to address and reduce the illicit trade in forestry products have had mixed results for several reasons and chiefly because exports have increased exponentially towards less-regulated emerging markets in China and other Asian countries. Notably, as a Chatham House-led project showed in its 2015 surveys, progress in fighting the illegal timber trade has been stalled since 2010 with the significant shift of the global timber trade from the United States and Europe to emerging Asian countries[108].

6.1. Challenges

The challenges to prevent illicit operations in the production and trade of African timber products are multifactorial and operate at various levels: the lack of availability of quality data, markets that are insensitive to provenance or sustainability of production and high demand for wood, the limits of regulation, a lack of capacity to enforce and insufficient coordination of efforts.

Lack of quality data

Curbing illicit trade in timber products through transparency, better accountability and tracking of flows, magnitudes and values will all require sound statistics. Almost all African countries have serious problems with data collection, archiving and analyses. Available statistics are provided by FAOSTAT-Forestry, the International Tropical Timber Organization (ITTO) forestry databases, and the UN Economic Commission for Europe (UNECE). These databases suffer from many issues including: discrepancies in data reported by import and export countries because of the lack of common standards in compiling data; data errors; differences in classifications and measuring

[107] *Lescuyer, G., Ndotit, S., Ndong, L.B.B., Tsanga, R. and Cerutti, P.O., 2014. Policy Options for Improved Integration of Domestic Timber Markets under the Voluntary Partnership Agreement (VPA) Regime in Gabon. CIFOR Infobrief No. 82. Bogor: Centre for International Research on Forestry (CIFOR).*

[108] *Hoare, A. 2015. Tackling Illegal Logging and the Related Trade: What Progress and Where Next? Chatham House, London. https://www.chathamhouse.org//node/18090.*

standards; inconsistent conversions; improper recording of transshipments; and smuggling[109]. Such deficiencies lead to inadequate market intelligence information on the main export destinations by species, products, magnitudes, values, and beneficiaries. Worst still, in terms of sustainability, a vacuum is created in terms of the real status and dynamics of the resources in terms of increment, mortality and regeneration rates. In such an opaque setting it becomes difficult to set and track timber export procedures and guidelines for global interests, which creates opportunities for criminals, rent seekers, and traffickers to intervene and insert their own economic interests in both exporting and importing countries.

Curbing illicit trade in timber products through transparency, better accountability and tracking of flows, magnitudes and values will all require sound statistics.

Non-sensitive markets and high wood demand

This barrier refers to the growing influence of domestic and international consumers who are not interested in the legal provenance of their purchased wood products. Less sensitive markets are the characteristics of some fast-expanding markets such as the Asian importers that place little or no importance on legal criteria or proof of origin[110]. Such companies typically break most fundamental forest laws, bribe officials to win public tenders, operate for years without the required documents, do not respect permitted quotas, log and export non-authorized species, and evade millions of dollars in taxes through sophisticated transfer pricing schemes[111]. For instance, powerful Chinese and Ghanaian traffickers explained to Environment Investigation Agency (EIA) undercover investigators how, with the help of ruling party members and complicity at all levels of government, they have established an institutionalized scheme, fueled by bribes, to mask the illegal harvest, transport, export, and CITES-licensing of rosewood timber[112].

Aside from the lack of sensitivity of some emerging markets to the issues connected with the illegal trade in wood, the surge in demand for tropical timber seems to be insatiable. China is one of the world's largest importers, consumers and exporters of wood-based products and has become the principal export destination for the timber-rich Congo Basin countries. Central African timber exports to China have increased by 60% from $652 million in 2009 to $1.041

[109] *Forest Trends. 2014. Overview of World Tropical Hardwood Resources, Forest Products Trade and Environmental Issues. PowerPoint Presentation. March 25, 2014. Shanghai, China. 21 slides.*

[110] *Carodenuto S.L. and S. Ramcilovic-Suominen. 2014. Barriers to VPA implementation: a case study of Cameroon's private forestry sector. International Forestry Review Vol.16(3): 278-288.*

[111] *EIA 2019a. Op. cit.*

[112] *EIA 2019c Op. cit.*

billion in 2017, making it the largest commodity exported from the region after oil. The growing Chinese appetite for Congo Basin timber has shifted trade flows in the region away from its historical European markets and toward Asia[113]. In Cameroon, a recent study shows that the surface area of forests under Sino-Asian control has doubled in just five years from 562,256 ha in 2014 to 1,046,594 ha in 2019[114]. These massive Sino-Asian capital[115] investments have engendered several problems in Cameroon's wood sector because the growing demand for wood exceeds what the forest can provide in the long term, especially in the non-permanent forest estate[116]. This unsustainable situation also holds true for Madagascar where EIA investigations showed that according to Chinese business leaders, the main factor influencing the Madagascar-China illegal trade in precious woods is not the ban, of which all of them were perfectly aware, nor even the increasing scarcity of the resource, but the scale of the demand[117].

Limits of regulation, enforcement capacity and coordination

The limitations of regulation have been linked to weak or ineffective enforcement capacities, biased justice systems, operational flaws, inadequate transparency, and poor coordination. Despite regulations limiting access to the EU and US markets, African timber products can still be exported to other countries where controls are weak, especially the rapidly growing Asian markets such as China. The development and operationalization of timber tracing and legality verification systems are an important objective of FLEGT Voluntary Partnership Agreements (VPA) but barriers to their implementation include financial and technical obstacles, norms and institutions and the latter are arguably the most difficult to address because they are inherent to the country's political economy. Widespread barriers to the implementation of agreements observed in Cameroon include corruption, the informal nature of the sector, non-sensitive timber demand, the technicalities of agreements, the high cost of legal purchase and lack of awareness on the part of the private sector[118]. However, some barriers are inherent to the design of the VPA system itself, suggesting that policymakers and FLEGT practitioners must rethink the current technical approaches and remain open to solutions more suited to their context, especially those of the informal sector[119].

[113] EIA 2019a Op. cit.

[114] Assembe-Mvondo S. 2019. Mapping of Sino-Asian Investments in Cameroon's Forestry Sector: Operators and flow trends. Study conducted for WWF-Cameroon. 37pp.

[115] This term refers to Chinese, Vietnamese, Malaysian, Singaporean, Indonesian, Indian and to some extent Lebanese -owned economic entities operating in the timber sector as logging companies.

[116] Assembe-Mvondo S. 2019. Mapping of Sino-Asian Investments in Cameroon's Forestry Sector: Operators and flow trends. Study conducted for WWF-Cameroon. 37pp.

[117] Basik, N.T. 2015. China's Hongmu Consumption Boom: Analysis of the Chinese Rosewood Trade and Links to Illegal Activity in Tropical Forested Countries. Forest Trends/UKAid.

[118] Carodenuto S.L. and S. Ramcilovic-Suominen. 2014. Barriers to VPA implementation: a case study of Cameroon's private forestry sector. International Forestry Review Vol.16(3): 278-288.

[119] Carodenuto S.L. and S. Ramcilovic-Suominen. 2014. Barriers to VPA implementation: a case

Inadequate transparency leads to significant discrepancies between the data provided by government, industry associations and companies. Corruption remains widespread, yet there is insufficient political will in government to directly engage with the problem which permits significant governance challenges and weak law enforcement to persist. Moreover, adequate reform of the small-scale logging sector to regulate growing domestic markets has failed in most countries. As a result, governance improvements have been limited. Greater transparency and more effective monitoring systems could reduce some of the pernicious impact of corruption in the forestry sector.

Initiatives to improve information management systems across the continent have been stifled by a lack of government support and the reluctance of state bodies to share information for fear of undermining their standing or revealing systematic corruption. In Madagascar for instance, the administration faced repeated demands from international donors in 2011 before publishing information on the extraordinary quantity of rosewood stocks that were illicitly harvested. In Gabon, it was impossible to get a national information system to work in 2013 despite having a finalized model and it took more than 15 years of funding from the International Tropical Timber Organization (ITTO) for it to happen. To compound these issues, some of the largest timber-producing countries in Africa, including Cameroon, the Congo, the DRC, and Gabon, are not signatories of the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, which entered into force in early 1999. This fact alone reveals a lack of political will to engage substantively with the problem.

study of Cameroon's private forestry sector. International Forestry Review Vol.16(3): 278-288.

In most African countries, the enforcement of laws and policies aimed at reducing illicit activities remains weak, which in some cases is linked to lack of personnel, or the absence of appropriate skills and inadequate logistics for field operations[120]. Operational flaws and biased justice systems are sometimes to be blamed for the flouting of bans and embargos and the use of fraudulent transit and CITES permits in many African countries. The biased justice systems favors timber barons and traffickers with social ties in high places[121]. Such was the case in Gambia, Ghana and Madagascar where investigative findings showed widespread corruption and collusion schemes that implicated officials at the highest levels of the government[122] [123]. It is reported that between 2014 and 2017, Zambia, with the support of a former president, exported 315,000 tons of rosewood to China worth about $163 million[124].

Detailed plans and technical guidelines are sometimes made available by government on how to perform inventory, transport, and marking operations of timber products but are not appropriately applied on the ground. The management of these activities by military forces without the support of expert staff sometimes compound operational efficiencies. This was the case in Madagascar with deficiencies reported on the failure to use invisible marking paint, incorrect logging of species identification, imprecise log measurement, imprecise evaluation of log quality, unsystematic moisture tests, and non-classification and storage of the logs in stacks of homogenous quality[125].

In most African countries, the enforcement of laws and policies aimed at reducing illicit activities remains weak, which in some cases is linked to lack of personnel, or the absence of appropriate skills and inadequate logistics for field operations

In other instances, political crises and armed conflicts have reduced a government's ability to extend the rule of law over substantial areas allowing illicit trade to become a major provider of income to rural poor people with limited economic opportunities. Other groups who also enjoy the provision of this illegal income include criminal gangs, terrorist organizations and others that operate outside state scrutiny and with no effective regulation[126]. To avert skill gaps in law enforcement some authors have proposed training for the judiciary, ministry staff and customs officials to enable them to understand the implications of these illicit activities and provide reasons to secure enough convictions of defaulters to act as future deterrents[127].

Aligned to these limitations are the issues of collaboration and coordination among stakeholders and countries as they address illicit activities in the timber sector. Given the complexity of crimes in the natural resources sector and the forestry sector, multidisciplinary approaches have been recommended to tackle them[128]. Clear examples are not readily available in Africa, but in Brazil, an inter-ministerial commission composed of law enforcement agencies, government environmental and intelligence agencies worked together against environmental crimes to curb illegal logging[129] [130] [131]. This illustrates the importance of coordination between lawmakers and enforcement agencies to implement positive policies. In Central and West Africa, the exact role of sub-regional institutions such as ECCAS and ECOWAS in coordinating national action is still under discussion. Important instruments such as the OECD Convention on Bribery or CITES are rarely implemented fully at a national level. The effectiveness of CITES is furthermore hampered by its limited scope as well as weaknesses in verification procedures. Additionally, INTERPOL, ITTO and the World Customs Organization all manage projects aiming to combat the illicit timber trade. Yet they do so separately and often only at a national level.

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[120] *Huwart, J.Y. and Verdier, L., 2013. Economic globalisation: Origins and consequences, OECD Insights. Paris: OECD Publishing.*
[121] *EIA. 2019d. Mukula Cartel. How timber trafficking networks plunder Zambian forests. ZAFFI-CO. 20 pp.*
[122] *EIA 2019b. BAN-BOOZLED How corruption and collusion fuel illegal rosewood trade in Ghana. Environmental Investigation Agency, 2019.*
[123] *Chanson R. 2020. Trafic de bois de rose en Casamance: un Suisse accusé de pillage par une ONG. http://www.rfi.fr/fr/afrique/20200325-gambie-trafic-bois-rose-casamance-yahya-jammeh*
[124] *MacEwen M. 2020. Exploring Trends in the International Media Coverage of Forests. March 2020. https://forestgovernance.chathamhouse.org/publications/trends-in-international-media-coverage-of-forests*
[125] *EIA 2015. Time for Action: An EIA briefing on illegal logging & related trade of precious woods for CITES SC66. 4pp.*
[126] *Karsenty, Alain. 2002. "Gouvernance' et forêts tropicales. L'exemple du Cameroun," Informations et Commentaires 119.*
[127] *Wells, K. M. Pfeiffer, M.B. Lakim, E.K.V. Kalko Movement trajectories and habitat partitioning of small mammals in logged and unlogged rainforests in Borneo J. Anim. Ecol., 75 (2006), pp. 1212-1223*
[128] *Goncalves, P. M., M. Panjer, T. S. Greenberg, and W. B. Magrath. 2012. Justice for Forests: Improving Criminal Justice Efforts to Combat Illegal Logging. Washington DC: The World Bank.*
[129] *Spapens, T., White, R. and Huisman, W., 2016. Introduction. In: Environmental Crime in Transnational Context. Global Issues in Green Enforcement and Criminology, edited by T. Spapens, R. White and W. Huisman. London: Routlegde, pp. 1-6.*
[130] *Elliot, L. and Schaedla, W. H., 2016. Handbook of Transnational Environmental Crime. Cheltendam: Edward Elgar, pp. 168-189.*
[131] *Bisschop, L., 2015. Governance of the Illegal in e-Waste and Tropical Timber. Case studies on Transnational Environmental Crime. London: Routledge*

6.2. Opportunities

Opportunities to curb illicit activities in the forestry sector exist in new avenues for engagement, market shifts in Europe, the USA and Japan requiring more stringent measures of verification, the increasing use of independent observers for transparency as well as growing awareness in the media of issues associated with forestry activities.

New avenues for engagement

Despite the evolution of an increasingly complicated policy framework, there remains space for innovation in the fight against illicit activities in the forest sector, especially in promoting greater transparency in data and business transactions at community and national levels, extending legal responsibility to the private sector and communities as well as increasing efforts to formalize logging and trade activities. Slow but appreciable improvements in governance have occurred in the Congo Basin over the last decade stimulated by local government-led reforms, regional exchanges of information, campaigns by local and international civil society organizations, and the growing cooperation with trading partner countries, such as the European Union (EU) through the FLEGT-VPAs[132]. In addition to the increasing efforts at certifying both forest estates and wood products, the FLEGT VPA processes are taking root in several African countries (including Ghana, Cameroon, Gabon and Liberia) aimed at producing FLEGT-licensed (legal) timber to European markets.

Market shifts in Europe, the USA and Japan

Since the 1990s, there has been increasing demand for sustainable and certified wood products by European, American and Japanese consumers. Nowadays, more retailers are demanding legal or certified wood products. Major companies, such as Walmart and IKEA, require suppliers to be able to not only document the country of origin of timber sources, but also demonstrate its legality or sustainability using third-party certification systems. Amendments to the US Lacey Act (2008), the EU Timber Regulation and the Australian Illegal Logging Prohibition Act make it illegal to import or sell any timber product taken in violation of laws of the producer and manufacturing country.

[132] *EIA 2019a. Op. cit.*

Increasing role of independent observers

Independent forest monitoring (IFM) has been a key feature of international efforts to improve forest governance since the 1990s. The Mandated Independent Monitor (MIM) is typically a civil society organization or a service provider that signs a Memorandum of Understanding with the government to gain access to sites (such as logging concessions, sawmills, ports, and ministerial departments) and official documents (such as harvest authorizations, invoices, official statements and logbooks). Through officially sanctioned investigations, the Monitor aims to provide specific, credible and verifiable information on forest law enforcement and governance issues.

Forest monitoring has become a component of the Voluntary Partnership Agreements (VPAs) and a pillar of the EU's Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan that entered into force in 2003 in response to rising international concerns about the social, economic and environmental impacts of illegal logging and its related trade. For example, in the Republic of Congo, IFM was initially implemented by two international NGOs, Resource Extraction Monitoring (REM) and Forest Monitor (FM), and the national civil society organization Cercle d'Appui a la Gestion durable des Forêts (CAGDF) was integrated as a partner in January 2014. The protocol agreement signed between these civil society organizations and the government of the Republic of Congo through the Ministry of Forest Economy allows the monitor to access relevant non-public information. The responsibilities of the monitor and its legal mandate are formalized in the Republic of Congo's new Forest Code[133]. The Code states: "An independent observer, member of national civil society organizations and recognized by the government, conducts independent or joint field missions alongside the agents from the administration of water and forests and produces regular reports and recommendations in compliance with forest legislation. The reports and recommendations of the independent observer are published after validation by a review committee." An official report from the independent monitor, prior to its publication, is examined and then validated by the "Review Committee," composed of representatives of the IM-FLEGT, the Forestry Administration, civil society and donors. Once published, the credibility of the reported observations and recommendations cannot be contested.

Increasing trends in the international media coverage of forestry activities

The way in which issues are covered in the global media not only reflects

[133] *République du Congo (RoC). 2020. Projet de loi portant code forestier. 10 avril 2020.*

common knowledge but also influences discussions by shaping the opinions of its audience[134]. The international media often plays a key role in informing the public as well as policymakers who often apply pressure upwards on key decision-makers. There has been an increase of two thirds in global coverage of deforestation and its link to climate change between 2014 and 2018. This recognition subsequently resulted in the signing of the New York Declaration on Forests in 2014 and the Amsterdam Declaration on Deforestation the following year as we well as the inclusion of REDD+ in the UN Paris Agreement in 2015. Despite this, however, international media coverage of illegal logging and trade decreased by nearly a quarter between 2016 and 2018 – falling back to the levels seen in 2014. This decline in global coverage of illegal logging and the increase in focus on climate change and deforestation has meant that, by 2018, coverage of these two issues was nearly on a par whereas, five years previously, illegal logging coverage dominated discussions with more than double the number of articles[135]. There are risks of deflecting attention away from illegal logging and illicit timber trade because efforts that have been undertaken to address them through governance and market reforms may be sidelined by stakeholders.

7.0 Conclusion and recommendations

The forestry sector is rife with poor legal compliance that deprives countries and communities of enormous revenues. This activity is perpetrated by criminal gangs, cartels and traffickers through the sidelining of laws, regulations, norms, guidelines and standards in their timber. The money generated from these illicit activities fuels insecurity in production areas, devastates local economies and drives the unsustainable exploitation of critical resources. Of particular policy relevance are the investments allocated along the various timber product lines and tree species categories that drive demand in importing countries with a ramification of economic, social and environmental implications.

Despite numerous attempts at local, national and international levels to curb illicit timber trade and related activities, desirable trade policies and regulations that will improve trade relations between the producers and importers are still evasive, at least in Africa. The drivers of illicit timber activities and its outcomes need to be better understood by all stakeholders working to combat these crimes. Exploring how to adapt opportunities to fit challenges will go long way in shaping the needed common understanding.

As timber trade flows from Africa to China is on an upward trend and at a high risk of illegality, the importance of engaging China in all measures being taken to fight illicit acts in the sector cannot be over-emphasized. Indeed, the complexity of illicit timber trade requires a multi-sector response underpinned by effective collaboration and coordination to eradicate the phenomenon and ensure mutual trade gains between exporting and importing countries as well as on the sustainability of timber resources.

Based on the evidence of this paper and conclusions drawn, the following recommendations may be used to guide future policy reforms and actions to tackle the illicit timber trade in Africa.

- Operations in timber value chains need to be more transparent and accountable to stakeholders, beneficiaries and the general public. This will require higher investments in science, data and technology to guide decision making processes and actions towards change;
- There is a need to use the data generated to sensitize stakeholders, to establish an appropriate funding mechanism to campaign against illicit trade, using the media and civil society to expose the issues and independent monitoring to ensure transparency;
- Employ an integrated and multi-stakeholder approach to fight illegality in timber production, transformation, transportation and trade. It will be vital to develop international statutory frameworks to oversee trade and harmonize policy across countries and markets. This will require effective collaboration and coordination of efforts to crack down on the networks of traffickers.
- Conduct thematic studies on the economic, environmental and socio-economic aspects of vulnerable species such as rosewood to establish their non-detrimental findings (NDF) reports to adhere to CITES regulations and to ensure sustainable management and legal export in producer member countries.
- Enhance policing and law enforcement e.g., enforcing the EU FLEGT or using African adapted FLEGT mechanisms. Find ways of making Sino-Asian timber importing countries adhere to legal rules and regulations. For instance, ensure timber-importing companies, financers and investors commit to carry out and verify legal, green procurement.
- Promote the legality verification and traceability systems for small-scale logging, timber processing and trade in producer member countries.

[134] *MacEwen M. 2020. Exploring Trends in the International Media Coverage of Forests. March 2020. https://forestgovernance.chathamhouse.org/publications/trends-in-international-media-coverage-of-forests*

[135] *Op cit.*

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