

Credit: EIA, Republic of Congo

AFRICAN LOG BANS MATTER:

Reforming Chinese Investment and Trade in Africa's Forest Sector

Investments by Chinese companies in Africa's forest sector have boomed in recent years, often playing a significant role in national economies, rural communities and stimulating technological transfer, especially related to timber processing.[1] Unfortunately, the win-win vision developed by Chinese and African governments is undermined by certain businessmen who are taking a radically different approach. The latter do not hesitate to bypass African national laws or take advantage of complicated if not confusing regula-tions, usually helped by accomplices in the local administrations, in order to supply logs to the manufacturing sector in China.

EIA's recent analysis shows that, from January 2014 to March 2018, over 89 percent of African log exports to China – worth over 6.7 billion dollars – originated from countries with total or partial log export bans. Many African countries have passed laws limiting or prohibiting the export of logs in an effort to promote domestic processing and to gain more control over illegal logging. Violations of log export bans have negative impacts on fragile economies, communities, and unique ecosystems all over Africa.

The ongoing dialogue under the auspice of the China-Africa Cooperation Forum (FOCAC), one of the most important South-South platforms, offers a unique opportunity for African countries and China to make African log bans effective and forests matter.

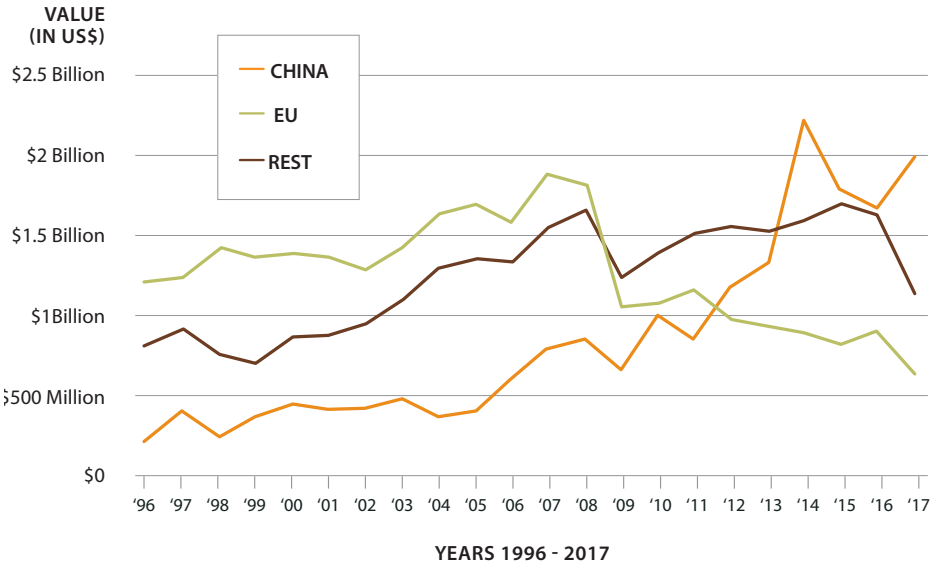


FIGURE 1: Evolution of timber exports from Africa, by value. **SOURCE:** EIA, 2018 based on UN Comtrade data

Africa-China Log Trade: A Mutual Dependency

China is one of the world's largest importers, consumers and exporters of wood-based products and has become the principal export destination for African countries (Figure 1).[2,3] African timber exports to China have increased from US$792 million in 2009 to US$1.84 billion in 2016, making it one of the most important commodities exported from the region.[4,5] At the same time, the forest sector accounts for a small proportion of total Chinese investment in Africa. Investment in agriculture and forestry accounts for only about 5 percent of the total number of planned investments in Africa.[6]

The growing Chinese appetite for African timber has shifted trade flows away from traditional European markets towards Asia. In the late 2000s, when timber demand from the EU dropped due to the economic crisis, China's demand stayed strong and helped sustain the growing African economies.[7]

Round logs dominate the Africa-China timber trade (Figure 2). Since China's implementation of its Natural Forest Protection Program in 1998, its domestic timber production has decreased dramatically, and the country has increasingly shifted its sourcing of tropical wood from domestic forests to overseas.[8,9] Raw material from plantations in China cannot meet the specific needs of the massive timber-based industries, in particular the furniture and plywood sectors; therefore tens of millions of Chinese processing facilities rely on sizable logs imports.[10]



Credit: Estacio Valoy, Mozambique

Between 1996 and 2017, Africa has grown as a major sourcing continent for tropical logs processed in China, overtaking Southeast Asia, dwarfing the Americas and now rivaling Oceania.[11]

Over this period, a mutual dependency developed between the industrial logging sector in Africa, primarily export oriented and traditionally reluctant to process locally, and the massive market for unprocessed round logs in China. Aware of a trend that maintains African nations as mere providers of raw material destined to be processed in



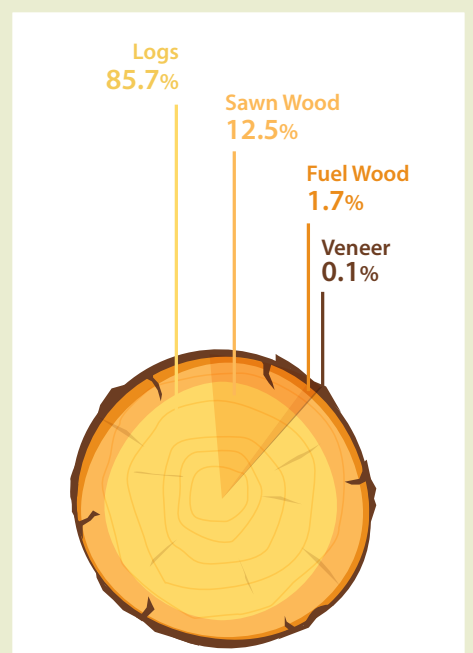


FIGURE 2: Africa-China timber trade from 2014 to 2017: the prevalence of logs (in volume)
SOURCE: EIA, 2018 based on Chinese customs data

Why EU and US importers should care about the issue?

The EU's and US's high demand for wood products made in China is a key driver leading Chinese industry to rely increasingly heavily on imports from Africa to meet the demand for tropical timber.

One typical example is the group of plywood-based products. Thousands of veneer mills located in Shandong Province frequently peal sizeable African logs, such as okoume (Aucoumea klaineana) or sapele (Entandrophragma cylindricum), before selling them to plywood factories that then export their products to the EU and the US, or feed further processing industries, such as cabinet manufacturers that will also export their final products to the EU and the US.

The massive breach of African log bans by Chinese importers contaminates the whole supply chain and causes all the products made from these logs to be non-compliant with the existing EU (EU Timber Regulation) and US (amended Lacey Act) prohibitions, thus traded in violation of laws designed to ensure that the EU and US are not contributing to global timber trafficking.

another continent – reminiscent of the European colonization of Africa – a growing number of African countries have prohibited the export of logs in an attempt to capture a larger share of the value added to their natural resources, create jobs and in many cases regain control over an exploding timber export sector.

The Mountains of Logs that Should Not Leave Africa

From January 2014 to March 2018, 34 African countries have exported logs to China. Of these at least 15 countries have currently a total log/wood export ban or logging ban in place, and at least six have a partial log export ban that applies to the timber exported to China. EIA analysis of Chinese import records indicates that at least 89 percent of the logs traded between Africa and China from 2014 to 2018 are coming from countries with a total or partial log export ban (Figure 3, Table 1). This trade represents over 6.7 billion US dollars.

Credit: EIA, China



The massive trade of logs from African countries with a total or partial log export ban has profound negative impacts on local economies, forest governance and fragile ecosystems, as illustrated in the following case studies about Mozambique, Nigeria and Congo – three of the top-five African timber exporters to China.

West Africa – Nigeria: Daylight Violation of an International Convention

A year after the investigation that revealed the largest fraud in recent history of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), EIA's new analysis indicates that Nigeria is still the largest exporter of rosewood logs to China, despite a longstanding export ban and increased control requirements under CITES.

In the course of a few years the volume of kosso (*Pterocarpus erinaceus*) logs traded between West Africa and China eclipsed all other rosewood species. The species likely became the most traded hardwood tropical species in the world.[34] The level of harvest has been highly unsustainable, causing massive social, economic and environmental impacts all over the region.[35] The boom began in Gambia and Benin, but as supplies in those countries were exhausted within a few years, the traders rapidly moved on through other countries, before settling on the largest – Nigeria.

Within a matter of months, the country transformed from being a net importer of wood to the largest exporter of rosewood logs in the world, and one of the largest wood exporters on the continent.[36] Between January 2014 and March 2018, every single day, an average of more than 40 twenty-foot shipping containers filled with rosewood logs were exported from Nigeria to China, equivalent to 6,797 logs and approximately 3,400 trees.[37,38,39,40] The international demand for kosso has fueled an unprecedented hunt for trees in Nigeria, devastating thousands of square kilometers of forests. The uncontrolled felling of millions of trees and the degradation of fragile dry forest ecosystems all over the country threaten the livelihoods of thousands of people and undermine the national effort to mitigate climate change.[41,42] EIA's 2017 investigation revealed that almost all kosso coming from Nigeria since 2014 had been exported in contravention of the long-standing federal log export ban.[43] Taraba, the primary producer state has prohibited all felling of kosso.[44] With supplies elsewhere already running dry, loggers have ravaged national parks, and smugglers have illegally imported wood from neighboring Cameroon.[45] Kosso has also been frequently sourced from areas controlled by the terrorist organization Boko Haram, which may well have profited from the trade.[46]

Faced with the overwhelming scale of the crisis, West African governments sought international help through



FIGURE 3: Legal status of log export
SOURCE: cf. Table 1

CITES. The inclusion of kosso in the CITES Appendix III (May 9, 2016) and subsequently Appendix II (January 2, 2017) placed additional responsibility on consumer countries – principally China and Vietnam – to prevent imports of illegally sourced kosso. As a consequence of the listing, almost all West African countries have controlled their trade with China, with the exception of Nigeria.

Despite the increased binding control requirements by CITES, Nigeria has exported twice as much rosewood to China in 2017 (over 630,000 tons) than in 2016 (311,000 tons). If exports recorded in the first quarter



Credit: EIA, Nigeria

	Country	Volume (in tons [% of total])	Value (in US $)	Legal Status of Log Exports
1	Mozambique	3.8 million [21%]	$1.289 billion	Log export ban since 2017[12]
2	Equatorial Guinea	3.1 million [17%]	$965 million	Log export ban since 2008[13]
3	Nigeria	2.7 million [15%]	$1.360 billion	Log export ban since 1976[14]
4	Cameroon	2.0 million [11%]	$694 million	Partial log export ban since 1994[15]
5	Congo (Rep. of)	1.8 million [10%]	$823 million	Partial log export ban since 2001[16]
6	Ghana	899,000 [5%]	$437 million	Ban-and-lift cycles since 2014[17]
7	Gambia	552,000 [3%]	$281 million	Log export ban since 2017, with temporary lift[18]
8	Benin	438,000 [2%]	$212 million	Log export ban effective since 2005[19]
9	Liberia	435,000 [2%]	$123 million	None
10	Zambia	300,000 [2%]	$338 million	Ban-and-lift cycle since 2010[20]
11	Dem. Rep. of Congo	272,000 [2%]	$168 million	None
12	South Africa	250,000 [1%]	$26 million	None
13	Sierra Leone	240,000 [1%]	$126 million	Timber export ban in place since 2008, with on and off lifts[21,22]
14	Central Afr. Rep.	233,000 [1%]	$103 million	None
15	Angola	224,000 [1%]	$75 million	None
16	Cote d'Ivoire	155,000 [1%]	$81 million	Ban on harvest of primarily traded rosewood species since 2013[23]
17	Togo	133,000 [1%]	$63 million	None
18	Guinea-Bissau	132,000 [1%]	$68 million	Five-year moratorium on all timber exports since 2015[24]
19	Mali	115,000 [1%]	$58 million	Log export ban since 2000[25]
20	Tanzania	41,000 [<1%]	$25 million	Log export ban since 2004[26]
21	Gabon	30,000 [<1%]	$20 million	Log export ban since 2010[27]
22	Guinea	18,000 [<1%]	$7 million	None
23	Senegal	4,000 [<1%]	$2 million	Ban on export of primarily traded rosewood species since 1998[28]
24	Malawi	2,000 [<1%]	$2 million	Log export ban since 2008[29]
25	Zimbabwe	1,000 [<1%]	$497,720	None
26	Namibia	1,000 [<1%]	$620,000	None
27	Uganda	557 [<1%]	$3 million	None
28	Madagascar	387 [<1%]	$268,918	Ban on harvest/export of primarily traded rosewood species since 2011[30]
29	Kenya	308 [<1%]	$276,157	Transitory logging ban since 2018[31]
30	Somalia	154[<1%]	$56,484	None
31	South Sudan	132[<1%]	$102,891	Ban on wood export since 2018[32]
32	Sudan	108 [<1%]	$18,234	None
33	Burkina Faso	242 [<1%]	$146,486	Log export ban since 2005[33]
34	Mauritius	2 [<1%]	$92,340	None

TABLE 1: Log export ban status in the African nations that have exported logs to China from January 2014 to March 2018, ranking from the largest to the smallest volume
SOURCE: EIA, 2018 based on Chinese customs data obtained from GTA. Note: specific sources are indicated for the log ban status

2018 (180,000 tons) are sustained, the country may export even more this year. The violation of the log export ban and the collapse of kosso populations, which have led loggers to venture ever deeper into the forest in the quest for valuable trees, are at odds with CITES Appendix II which should ensure that trade is legal and does not threaten the survival of the species.



Credit: EIA, China

Central Africa – Congo: Systematic Violation of the Forest Code

In order to address illegal logging, encourage the development of a domestic processing industry and create added value from wood production, Congo adopted laws prohibiting or considerably limiting the export of unprocessed timber. In Congo, Article 48 of the Forest Code states that "Products from natural or planted forests must be transformed in Congo, so that exports do not relate to raw material but to finished or semi-finished products."[47] Only one exception is permitted in Congo: "High-quality wood, destined for certain industries not yet established in the country, is exported with the authorization of the minister in charge of water and forests within the limits of 15 percent."[48] In other words, when very specific technology required to process certain secondary products is not available in country, a company is allowed to export a maximum of 15 percent of its production as logs. The remaining 85 percent of the annual production must be processed domestically, and may only be exported as sawn boards, veneer or a similar processed wood product.[49,50]

China ranks as Congo's number one timber trading partner.[51] Most of the logging companies operating in Congo export their logs to China, which absorbs over 80 percent of all the logs felled in Congo.[52] EIA's analysis indicates that none of the logging companies operating in Congo have respected the 85/15 quota rule during the period from 2008 to 2017 (Figure 4).

Congolese authorities have taken a number of enforcement measures against such violations. In 2012, the Congolese forestry administration suspended the export of round-wood for several companies for a period of over seven months (May 10, 2012-December 31, 2012).[53] In 2013, during the operation "Back to Factory," 55,000 cubic meters of logs were stopped at the port of Pointe Noire because they exceeded the authorized export quota of the respective logging companies.[54]

Despite these efforts, the country has systematically been exporting more logs to China than authorized by the Forest Code. Loopholes in the forest legislation, lack of transparency in the forest sector and the broad discretionary power given to senior

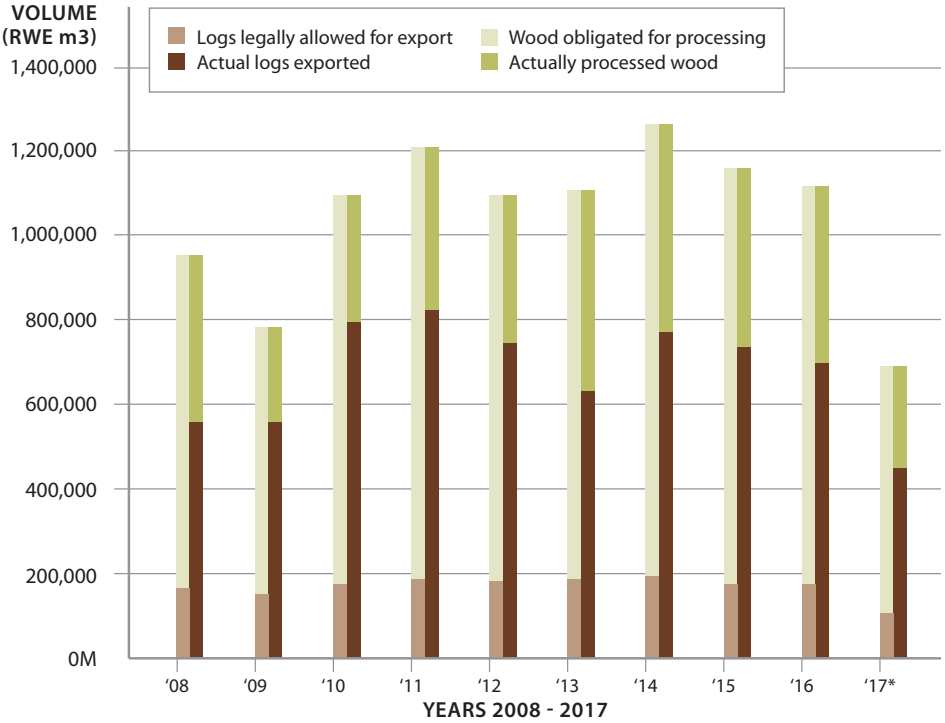


FIGURE 4: Comparison of the volume of logs legally allowed to be exported vs actually exported, in volume
SOURCE: EIA, 2018 based on SCPFE data. *: first half of the year only

officials are among the main problems.[55] EIA's investigation demonstrates that the Minister benefits from important leeway to personally "negotiate" the fines with the companies found non-compliant with national laws. In the same manner, the Minister has unilaterally granted "exemptions" related to the volume of logs that will not be processed in the country, in contravention of the national forest code.[56,57]

With forest concessions covering over 65 percent of the Congolese territory (13.9 million hectares), the country has the highest share of national territory allocated to industrial logging in the Congo Basin.[58] The influence of the timber sector and related trade has likely no equivalent in the tropics.[59] Violation of the log export quota hurts the national economy, the timber sector being the second most important natural resource exported, after oil.[60] In a country that relies on the vitality of the timber sector as the second largest employer, such violations of law are devastating as they significantly diminish job creation, reduce tax collection and investment potential in the sector.[61] Legal violations such as log export quota breaches, and associated corruption, also undermine forest governance and weaken relevant institutions.[62]

East Africa – Mozambique: The Million Ton Fraud

China consumes more than 90 percent of Mozambique's exported logs.[63] Mozambique's forestry and timber sectors have been plagued by crime and corruption for years.[64] An export-oriented timber sector has relied on illegal logging, unsustainable exploitation and systematic smuggling for its growth.

In an attempt to tackle the crisis, the Mozambican Parliament unanimously passed a bill banning the export of unprocessed timber that came into effect on January 1, 2017.[65] Aware of the level of fraud, the government went one step further to curb the exploding illegal trade and it prohibited the logging of the principal species imported by China [*Pterocarpus tinctorius* (nkula), *Swartzia madagascariensis* (ironwood), and *Combretum imberbe* (mondzo)], since March 29, 2018.[66] The Environment Minister, Mr. Celso Correia, reportedly described the situation as being nothing short of a "war" against "organized crime."[67] The Minister estimates that illegal logging costs his country more than half a billion dollars a year. In March, the government launched "Operation Trunk," inspected over 120 timber yards, and uncovered illegal operations in 75 percent of them. Mozambique's government seized over 222,000 cubic meters of logs and imposed over 2,600 fines for illegal timber operations, totaling more than US$11 million.[68]

Despite these effort by Mozambique, it appears that the illegal logging and export crisis continues. EIA's analysis of declared Chinese imports illustrates the power of the timber mafia in Mozambique. In 2017, Mozambique exported almost a million tons of logs to China in violation of the export ban and further regulations, equivalent to 36,370 containers.[69,70] The perpetrators of this criminal activity rely on a well-oiled scheme and bribing system that involves customs officials, shipping agents, and harbor operators.[71]

Apart from the enormous loss in revenue for the national government, the violation of the log export ban in Mozambique has profound negative impacts on rural communities. Loggers entering the communities frequently cause social disruption and division, in particular by paying certain local leaders to obtain their consent.[72] For this reason, the recently signed Memorandum of Understanding between Mozambique and China that encourages investment in timber processing in Mozambique is certainly a positive step forward.[73] Nevertheless, given the entrenched level of corruption associated with the timber mafia in Mozambique, the real impact of this initiative will depend on reciprocal deterrent measures by both the producing and the importing country.



Credit: Mathias Rittgerott/Rettet den Regenwald, Nigeria

Conclusion: Transforming the Timber Trade Relationship

Illegal logging and fraudulent exports by Chinese businessmen seeking quick profits are causing significant damage to local communities and national economies in many parts of Africa. These actions have severe consequences for fragile forest ecosystems, local livelihoods, and the global climate. In addition, these criminal acts threaten the significant investments by forward-thinking Chinese and other entrepreneurs and investors in Africa's forest sector. Environmental harm from illegal logging also causes reputational damage and tarnishes Chinese investments in other sectors, including agriculture, mining, hydropower, and infrastructure.

China's ongoing large-scale imports of logs – often in contravention of African national laws – are preventing reform of national forest sectors and the development of local economies.

The dialogue under the auspice of the FOCAC meeting provides an opportunity for China and African nations to work together to create a positive legal environment that favors long-term investments for the development of a stable and sustainable forest products industry.

For that, EIA recommends:

- African governments clarify and publicize their national laws regarding log export;
- Chinese government establishes a mechanism that prohibits the entry of illegal timber and ensures importers' due diligence;
- Africa and China collaborate in investigating and prosecuting high-level forest criminals.

Sources include:

1 GHY, 2015. Available at: http://ghy.forestry.gov.cn/uploadfile/ghy/2016-4/file/2016-4-21-31a5ea5def9e4a3a9ca4cece0a098c8c.pdf. Consulted on July 22, 2018.
2 ITTO/CAF, 2012. *Demand and Supply of Tropical Wood Products in China Towards 2020.* Beijing, China.
3 EIA analysis based on UN Comtrade data, available at: https://comtrade.un.org/. Consulted on July 22, 2018.
4 Huang, W et al., 2012. Who is importing forest products from Africa to China? An analysis of implications for initiatives to enhance legality and sustainability. *Environment, Development and Sustainability* 15 (2) 339-354.
5 ITTO, 2017. *Biennial Review and Assessment of the World Timber Situation: 2015-2016.* Yokohama, Japan.
6 Wilkes, A., 2016. *China-Africa forest trade and investment An overview with analysis for Cameroon, Democratic Republic of Congo, Mozambique and Uganda.* IIED. London, UK.
7 Wenbin, H., et al., 2012. Who is importing forest products from Africa to China? An analysis of implications for initiatives to enhance legality and sustainability. *Environment, Development and Sustainability*. Volume 14, No 6.
8 Yang, H., 2017. China's Natural Forest Protection Program: Progress and Impacts. *The Forestry Chronicle*, 93(2): 113-117.
9 ITTO/CAF, 2012. Op. cit.
10 Ibid.
11 Wenbin, H. and S. Xiufang, 2013. *Tropical Hardwood Flows in China: Case Studies of Rosewood and Okoumé.* Forest Trends, World Agroforestry Center, CIFOR: London, UK.
12 CIFOR, 2014. Available at: https://forestsnews.cifor.org/22055/surge-in-chinese-demand-exposes-cracks-in-mozambique-forest-policy?fnl=en. Consulted on July 22, 2018.
13 UNECA, 2015. Available at: https://www.uneca.org/sites/default/files/uploaded-documents/SROs/Central-Africa/ICE31/cie_2015-sro-ca-industrie-forestiere-transformation-structurelle-ac.pdf. Consulted on July 22, 2018.
14 EIA, 2017. *The Rosewood Racket. China's billion dollar illegal timber trade and the devastation of Nigeria's forests.* Washington, DC, US.
15 Article 71 of the Law No 94/01 and Decree No 0872/MINEF, Cameroun.
16 Article 48 of the Law No 16-2000 of 20 November 2000 on the Forest Code, Republic of Congo.
17 Ghanaweb, 2017. Available at: https://www.ghanaweb.com/GhanaHomePage/business/Stop-issuing-felling-permits-Minister-directs-forestry-commission-513196. Consulted on July 22, 2018.
18 APAnews, Available at: http://apanews.net/en/news/gambia-temporarily-lifts-ban-on-timber-logs-re-export-trade. Consulted on July 22, 2018.
19 Decree No 2005-708 of 12 November 2005, Benin.
20 Cerutti, P. et al., 2018. *Informality, global capital, rural development and the environment: Mukula (rosewood) trade between China and Zambia.* IIED/CIFOR. London, UK/Lusaka, Zambia.
21 APA news, 2018. Available at: http://apanews.net/en/news/sierra-leone-govt-temporarily-lifts-ban-on-timber-export. Consulted on July 22, 2018.
22 Xinhua, 2018. Available at: http://www.xinhuanet.com/english/2018-04/11/c_137103871.htm. Consulted on July 22, 2018.
23 Decree No. 2013-508. of 25 July 2013, Cote d'Ivoire.
24 Reuters, 2018. Available at: https://af.reuters.com/article/topNews/idAFKBN1FC21U-OZATP. Consulted on July 22, 2018.
25 Decree No. 00-505/P-RM of 16 October 2000 and Inter-ministerial interdiction No 2014 -1856 / MC-MEFSG-MEEA of 10 July 2014, Mali.
26 Lukumbuzya K. and C. Sianga, 2017. Overview of the Timber Trade in East and Southern Africa: National Perspectives and Regional Trade Linkages. TRAFFIC and WWF. Cambridge, UK.
27 Order No 132/MFEPRN/SG/DGICBVPF, Gabon.
28 *Pterocarpus erinaceus* export is strictly prohibited pursuant to the Forest Code (Law No 98-03 Act of 8 January 1998) and Decree No 98-164 of 20 February 1998, Article 63, Senegal.
29 The Nation, 2015. Available at: https://mwnation.com/govt-acts-timber-exports/. Consulted on July 22, 2018.
30 EIA, 2015. *Time for Action: An EIA Briefing for the 66th meeting of the Standing Committee.* Washington, D.C.: USA.
31 Daily Nation, 2018. Available at: https://www.nation.co.ke/news/Tobiko-extends-logging-ban-by-6-months/1056-4576438-12rn1jcz/index.html. Consulted on July 22, 2018.
32 Sudan Tribune, 2018. Available at: http://www.sudantribune.com/spip.php?article65796. Consulted on July 22, 2018.
33 Decree No 2005 - 003/MECV/MCPEA of 9 March 2005, Burkina Faso.
34 Lawson, S., 2015. *The Illegal rosewood boom in West Africa: How Chinese demand is driving conflict, corruption and human rights abuses,* Presentation to Chatham House Illegal Logging Stakeholder Update meeting, June 25, 2015.
35 Senegal, 2016. CoP17 Inf.48. *Global Status of Dalbergia and Pterocarpus rosewood producing species in trade.* Document prepared by Global Eye and submitted by Senegal.
36 EIA analysis based on UN Comtrade data, available at: https://comtrade.un.org/. Consulted on July 22, 2018.
37 Based on typical load of 20 cubic meters in a twenty-foot shipping container.
38 Internal dimensions of 20-foot container are: 5.897 m in length, 2.348 m in width, and 2.385 m in height.
39 According to source, on average two logs are taken from one single tree in the wild.
40 According to source, on average at least 140 logs of *Pterocarpus erinaceus* are loaded into a 20-foot container.
41 Leadership, 2017. Available at: http://leadership.ng/2017/05/16/effects-uncontrolled-rosewood-exploitation-nigeria/. Consulted on July 22, 2018.
42 Nigeria, unknown date. Available at: http://climatechange.gov.ng/climate-knowledge/official-publications/policies/national-policy-on-climate-change/. Consulted on July 22, 2018.
43 Ibid.
44 EIA, 2017. Op. cit.
45 Ibid.
46 Ibid.
47 Article 48 of the Law No 16-2000 of 20 November 2000 on the Forest Code, Republic of Congo.
48 Article 180 nouveau alinéa 1, Law No 14-2009 of 30 novembre 2009, Republic of Congo.
49 Article 180 of the Law No. 16-2000 of 20 November 2000 on the Forest Code, Republic of Congo
50 Article 180 new of the Law n° 14-2009 of 30 December 2009 amending certain clauses of the Law n° 16-2000 of 20 November 2000 on the Forest Code.
51 EIA analysis based on the Timber Product Export Control Department (SCPFE in French)'s annual analysis from 2008 to 2017.
52 Ibid.
53 CADGF et al., 2012. Observation indépendante de la mise en application de la loi forestière et de la gouvernance (OI-FLEG) en appui aux APV FLEGT dans le bassin du Congo, Rapport Annuel. Brazzaville, Republic of Congo.
54 Adiac-Congo, 2013. Available at: http://adiac-congo.com/content/exportation-forestiere-des-grumes-illegalement-exploitees-et-entreposees-au-port-de-pointe. Consulted on July 22, 2018.
55 Ibid.
56 CAGDF, 2016. Analyse sur l'exportation des bois en grumes en République du Congo. Note d'analyse No10. Brazzaville, Republic of Congo.
57 CAGDF, 2016. Etat des lieux de l'application de la loi forestière et de la gouvernance en République du Congo de 2013 à 2016. Brazzaville, Republic of Congo.
58 COMIFAC, 2018. Data available at: https://www.observatoire-comifac.net/monitoring_system/concessions. Consulted on July 22, 2018.
59 Kleinschmit D., et al. (eds.), 2016. *Illegal Logging and Related Timber Trade - Dimensions, Drivers, Impacts and Responses: A Global Scientific Rapid Response Assessment Report.* IUFRO World Series no. 35. Vienna: Austria.
60 De Wasseige C. (ed.), 2009. *Les forêts du bassin du Congo : état des forêts 2008.* Luxembourg : Office des publications officielles des Communautés européennes.
61 Viadeo, 2012. Available at: http://fr.viadeo.com/fr/groups/detaildiscussion/ ?containerId=002j1hmpygkvlre&forumId=0022mpks730ptej&action=messageDetail&messageId= 002mz8gsab8nt31. Consulted on July 22, 2018.
62 Kishor, N. and R. Damania. 2006. Crime and Justice in the Garden of Eden: Improving Governance and Reducing Corruption in the Forestry Sector. In J. Edgardo Campos and Sanjay Pradhan, eds. *The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level.* Washington, DC: The World Bank.
63 Macqueen, D., 2018. *China in Mozambique's forests: A review of issues and progress for livelihoods and sustainability.* IIED, London.
64 EIA, 2014. First Class Crisis: China's Criminal and Unsustainable Intervention in Mozambique's Miombo Forests. London, UK.
65 Oxpeckers, 2017. Available at: https://oxpeckers.org/2017/01/timber-looting-continues-in-mozambique/. Consulted on July 22, 2018.
66 Macauhu, 2018. Available at: https://macauhub.com.mo/2018/04/11/pt-mocambique-dificulta-abate-de-arvores-e-exportacao-de-madeira/ Consulted on July 22, 2018.
67 News24, 2017. Available at: https://www.news24.com/Africa/News/mozambique-battles-illegal-logging-to-save-tropical-forests-20170426. Consulted on July 22, 2018.
68 APAnews, 2017. http://apanews.net/en/pays/mozambique/news/seized-mozambican-timber-to-go-under-the-hammer-minister. Consulted on July 28, 2018.
69 EIA's analysis base on the Global Trade Atlas (GTA) data.
70 Considering a 20 ft. Container loading 25 tons.
71 Oxpeckers, 2017. Available at: https://oxpeckers.org/2017/08/money-talks/. Consulted on July 22, 2018.
72 Mackenzie, C., 2006. *Forest Governance in Zambézia, Mozambique: Chinese Takeaway!* Fongza: Quelimane, Mozambique.
73 Reuters, 2018. Available at: https://www.reuters.com/article/us-mozambique-forest-logging/mozambique-reforms-timber-sector-to-counter-illegal-logging-idUSKBN1KG1F8. Consulted on July 22, 2018.

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