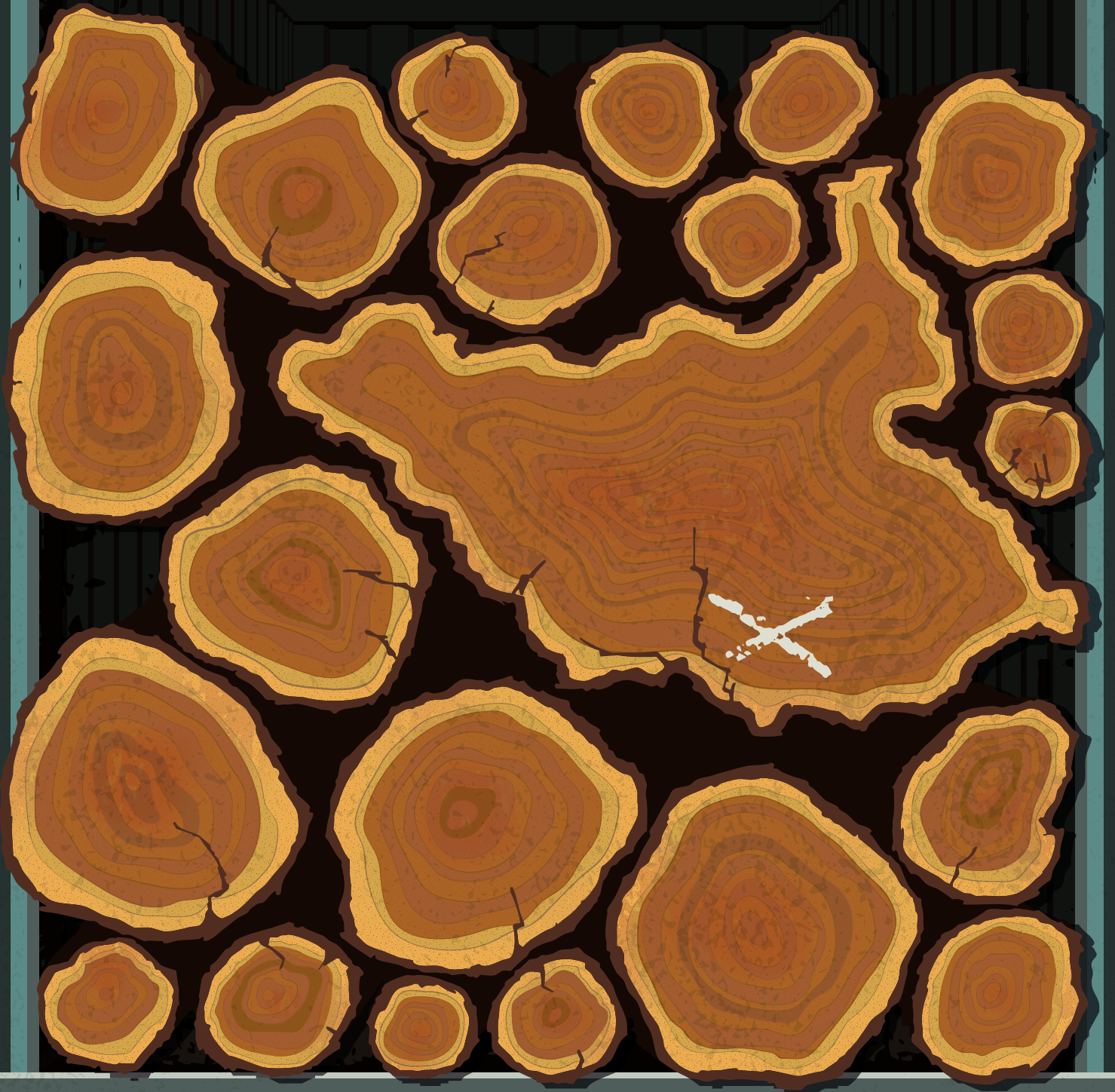


C4ADS

innovation for peace

MONEY TREE

TEAK AND CONFLICT IN SOUTH SUDAN



ABOUT C4ADS

C4ADS (www.c4ads.org) is a 501(c)(3) nonprofit organization dedicated to data-driven analysis and evidence-based reporting of conflict and security issues worldwide. We seek to alleviate the analytical burden carried by public sector institutions by applying manpower, depth, and rigor to questions of conflict and security. Our approach leverages nontraditional investigative techniques and emerging analytical technologies. We recognize the value of working on the ground in the field, capturing local knowledge, and collecting original data to inform our analysis. At the same time, we employ cutting edge technology to manage and analyze that data. The result is an innovative analytical approach to conflict prevention and mitigation.

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COVER IMAGE

Front cover art by Brian G. Payne.

ABOUT THE AUTHORS

Cecile Neumeister is a Senior Analyst at C4ADS on the Natural Resources Cell. She primarily covers illegal logging, deforestation, and their convergence with other illicit activity. She received her undergraduate degree in International Politics from Georgetown University.

Stella Cooper is a Senior Analyst at C4ADS on the Conflict Finance and Irregular Threats Cell. She primarily covers weapons trafficking, natural resources and illicit financial flows in South Sudan. She received her undergraduate degree in International Studies from American University.

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OUR TECH PARTNERS

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ANALYSIS POWERED BY



EXECUTIVE SUMMARY

Timber is a valuable natural resource that, like other extractives, is vulnerable to exploitation because of high revenue margins and difficulties in regulation. Illegal logging has become the most lucrative natural resource crime valued at between \$52 and \$157 billion per year¹, and deforestation is an environmental and security concern globally. Teak, a high-value hardwood, has been coveted by global markets for years for its durability and beauty. International demand is driving depletion of teak reserves and has forced countries to implement logging and export bans in recent years.

In conflict environments, natural resources are even more vulnerable to exploitation. Conflicts often exacerbate opportunities for illicit actors to co-opt underregulated natural resource markets, such as teak. South Sudan has one of the largest reserves of teak in Africa, which reached maturity during the same decade that the country gained independence and entered a violent civil war.^{2,3} Teak has since become a revenue source for various armed actors within the conflict, including government and opposition forces.

Within the context of South Sudan's ongoing conflict, insufficient regulation and growing international demand have led exploitative and illicit actors to profit from South Sudan's teak market, rather than generating sustainable revenue for local communities and the nation of South Sudan. In this report, C4ADS examines how conditions within South Sudan have made its teak sector more vulnerable to exploitation from illicit actors and contributed to the country's instability.

- First, conflict environments create opportunities for illicit actors such as armed groups to exploit natural resources for financial profit. Particularly in South Sudan, natural resources including teak are central to the conflict dynamic because of their role in financing armed actors, including government and opposition forces.
- Second, a lack of clear regulation makes it difficult to distinguish between legal and illegal teak operations in South Sudan. This leads to regulatory gaps that benefit actors engaged in illicit activity. The same conditions that make teak profitable for conflict finance also appeal to corrupt politicians and other illicit actors.
- Third, international demand for teak has exacerbated underlying issues plaguing South Sudan's teak sector. Because there is no publicly available trade data for South Sudan, C4ADS used trade data from other markets within the teak supply chain to offer new insight on the likely size of the South Sudanese teak sector, as well as how opportunistic foreign actors exploit this trade. Trade data reviewed by C4ADS shows that teak exports may be more than 2,400 times larger than figures shown in Comtrade data provided to the UN.
- Finally, we highlight a case study of a South Sudanese teak company, Lukiza Limited, which has seemingly been involved in teak logging and was beneficially owned by foreign political elites.

These factors illustrate how underregulated natural resource sectors in conflict economies can benefit illicit actors.

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METHODOLOGY

Limited information is publicly available on South Sudan's teak trade, in part because it is an informal market. The lack of forestry concession information, export data, and revenue reporting out of South Sudan makes it unclear how large, profitable, or sustainable the teak industry may be. To fill in some of those gaps, this report has focused on examining public reporting, trade data, and corporate records that offer new understanding into specific elements of the South Sudanese teak trade. Where possible, C4ADS compared existing estimates with new information found within the data analyzed.

In order to examine how much of South Sudan's teak may be reaching global markets, we analyzed trade data from Uganda and India. Uganda is a common transit country and India is a major destination country for South Sudan's teak. Therefore, trade data from these countries mirrors a component of South Sudan's otherwise unknown exports. While not representative of the entire market, estimates derived from Indian and Ugandan data are useful, especially given that South Sudan does not publish export data.

The Ugandan trade data used for this report included over 2.2 million rows of import-export data between January 2018 and March 2019. The India data included imports between January 2017 and July 2019 that listed the origin or export country as Uganda, the Democratic Republic of Congo (DRC), Kenya, or Sudan. It is important to note that the India trade data examined does not distinguish between Sudan and South Sudan. Given that Sudan does not have any known teak market, the analysis in this report assumes that teak listed as originating from Sudan is actually of South Sudanese origin.⁴

To identify shipments of teak and other timber products, we used HS codes (Harmonized System Codes), which are an international classification system for the contents of shipments.⁵ Although HS codes vary in their application,⁶ we initially used general codes associated with timber products (Chapter 44) and further narrowed down our scope using HS codes specifically associated with teak.⁷

This report focuses exclusively on teak and not the trade in other timber products. Due to the time period of the trade data examined, C4ADS did not examine how changes in the ongoing conflict, including the R-ARCSS peace agreement,⁸ may have impacted trade flows.

C4ADS uses official corporate records and trade data wherever available to attempt to verify corporate holdings and commercial relationships. However, this information represents a snapshot of corporate and trade activity at a given time: records may not be updated regularly, may not be consistent or wholly accurate, and may not have the same standards of reporting across jurisdictions, among other limitations. In addition, public records do not reveal all details of operations of a company or relationships between entities. Therefore, C4ADS limits its analytical conclusions to those supported directly by underlying documentation.

Unless explicitly stated, the mention of an individual, company, organization, or other entity in this report does not necessarily imply the violation of any law or international agreement and should not be construed to so imply.

INTRODUCTION

Timber is a valuable natural resource that, like other extractives, is vulnerable to exploitation due to high profit margins and regulatory challenges. Regions with large tropical forests, such as Southeast Asia, Central Africa, and South America, are particularly affected by illegal logging, where “an estimated 50 to 90 percent of timber ...is acquired illegally.”⁹ In fact, illegal logging is the most lucrative natural resource crime, currently valued between \$52 and \$157 billion per year.^{10 11}

Teak (*tectona grandis*)¹² is a high-value tropical hardwood used for wood carving, furniture, and shipbuilding. For years, global markets have coveted teak for its durability, beauty, and strength.¹³ However, the teak trade, both licit and illicit, contributes to a variety of issues, including deforestation, environmental degradation, and displacement of wildlife in India, Myanmar, and other teak producing countries.¹⁴ Deforestation of teak has escalated as global demand grows, a direct consequence of teak's high value and scarcity. In recent years, many countries have been forced to implement teak logging and exporting bans to curb deforestation, particularly in Asian countries that have depleted their domestic teak forests.¹⁵ However, teak continues to be logged around the world, often using unsustainable logging practices to satisfy international demand.¹⁶

South Sudan's teak reserves are among the largest in Africa and were originally planted in the 1940s by British colonists.^{17 18 19 20} As in many other countries around the world, South Sudanese teak is being exploited at an unsustainable rate.²¹ Rising international demand for South Sudan's teak has driven environmentally harmful and unsustainable exploitation of the country's teak forests that could otherwise have long-term benefits for South Sudan's economy.²² Deforestation in South Sudan has become such an issue that, in 2018, South Sudan banned the export of charcoal in an attempt to counter illegal logging of the country's forests, including teak.^{23 24 25 26}

In conflict environments, natural resources are particularly vulnerable to exploitation. Conflicts create opportunities for actors engaged in illicit activity to co-opt underregulated natural resources, such as teak. This dynamic has manifested itself in South Sudan. The country gained independence amidst ongoing conflict around the same time that its teak plantations reached maturity.^{27 28 29} Within this conflict, exploitation of natural resources, including teak, has been an important source of revenue for armed groups, contributing to instability. According to the United Nations Human Rights Council, “oil revenues and income from other natural resources such as illegal teak logging, have continued to fund the war, enabling its continuation and the resulting human rights violations.”³⁰

In addition to active conflict, a variety of other factors have also contributed to the exploitation of South Sudanese teak. Insufficient and conflicting regulations governing South Sudan's teak sector have hampered efforts to address exploitative practices. Illicit actors have particularly benefited from this dynamic. Concurrently, growing international demand for teak has created an incentive for foreign companies to extract South Sudan's teak, often to the detriment of local communities. Finally, these conditions have also permitted corrupt local and foreign political elites to profit from South Sudanese teak. As a result, opportunistic illicit actors have profited from the exploitation of teak, diverting benefits from local communities and the nation writ large.

Teak in South Sudan's Equatoria Region

South Sudan's teak is concentrated in the Equatoria region,³¹ the southern region of the country. Violence in the Equatorias escalated following the 2015 peace agreement, when a “devastating counter insurgency”³² began. During this time, the opposition (SPLA-IO) competed for regional control with the government.^{33 34 35 36}

Teak could play an important role in the economy of the Equatorias particularly given that the region does not have significant oil production, otherwise the country's largest industry.^{37 38 39 40} However, violence, governance challenges, and conflict between Equatorian communities and the government⁴¹ have impeded investment in teak, particularly in former Central and Eastern Equatoria.^{42 43}

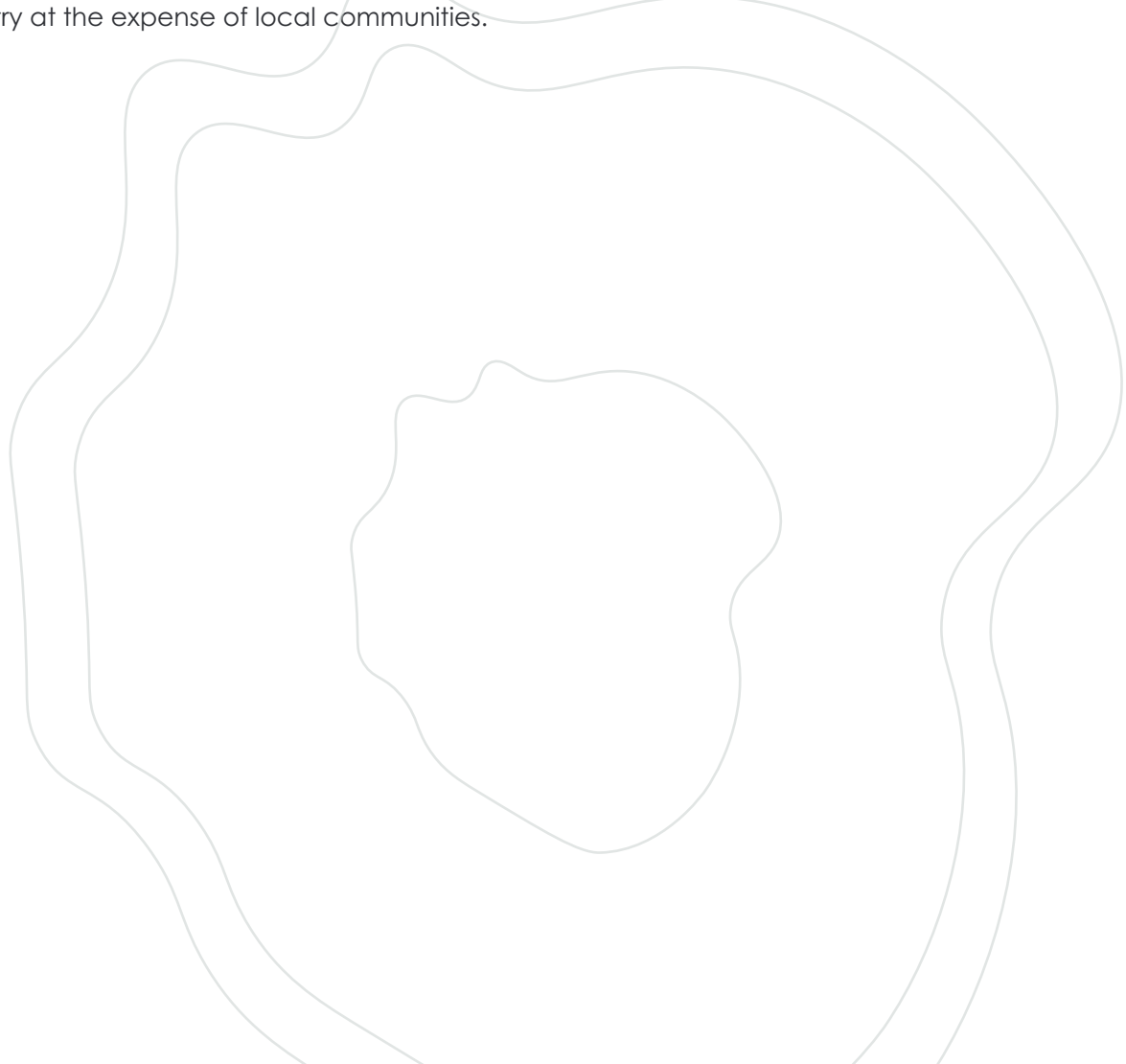


TEAK'S ROLE IN CONFLICT FINANCE

Conflict environments create opportunities for illicit actors such as armed groups to exploit natural resources for financial profit.^{44 45 46 47} Particularly in South Sudan, natural resources including teak are central to the conflict dynamic because of their role in financing armed groups.⁴⁸ Teak is an especially important source of revenue for armed actors in the Equatorias given that they generally do not have access to oil, which has been the primary revenue source in other areas of the country.^{49 50 51}

Nearly every armed group in South Sudan, from the government forces (SSPDF)⁵² to the opposition (SPLA-IO), has profited from the teak trade.^{53 54 55 56 57} According to the United Nations Panel of Experts established pursuant to Resolution 2428 (UNPOE), "for teak companies and small-time loggers, paying armed groups is a necessary cost of doing business."⁵⁸ It should be noted that other opposition forces and armed groups, including the National Salvation Front (NAS)⁵⁹, play a significant role in conflict in the Equatorias.⁶⁰ However, it is unclear in available public reporting if they profit from the teak trade.⁶¹ Even the military of neighboring Uganda, the Ugandan People's Defense Force, has reportedly profited from logging in South Sudan.^{62 63 64}

Both government and opposition forces have been known to coerce local communities and teak companies into paying for protection and transport in their respective areas of control.⁶⁵ As documented by the UNPOE, some armed groups charge laborers and teak companies for access to logging sites, while some are forced to pay protection fees. In other cases, armed actors establish checkpoints along major roads and demand transit fees. Such payments reveal how natural resources in South Sudan, including teak, support the continuance of armed conflict in the country at the expense of local communities.



REPORTED INVOLVEMENT OF ARMED ACTORS IN TIMBER TRADE*

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- OPPOSITION
- GOVERNMENT
- BOTH

- 1 SPLA and SPLA-IO have protection schemes that require teak companies and transporters to pay armed groups for access to teak.
- 2

WESTERN EQUATORIA

- 3 Illicit harvest of teak and has SPLM/A-IO checkpoints.
- 4
- 5
- 6 SPLM/A-IO Major General John Mohammedo Sabadari participated in failed negotiations with the government of Gbudwe State over teak plantations.
- 7 Teak revenues used to purchase National Police Service Uniforms and pay salaries to police and SSPDF units.
- 8 Illicit harvest of teak and has SPLM/A-IO checkpoints.
- 9 SPLM/A-IO groups have profited from teak in Western Equatoria.
- 10 SPLA and SPLA-IO have protection schemes that require teak companies and transporters to pay armed groups for access to teak.

CENTRAL EQUATORIA

- 11 SPLA units operating in and around Yei also charge from \$20 to \$22 per tree, or around \$2,500 per truck, for protection services.
- 12 Government supports the teak trade including through SSPDF protection.
- 13
- 14 SPLM/A-IO logging sites.
- 15 Teak harvesters pay the SPLA-IO in advance for protection ranging from \$14 to \$16 per tree, or close to \$2,000 for a truckload of around 120 unmilled logs. Government officials of Yei River State affiliated with SPLA-IO distribute the revenue across various SPLA-IO units or use it to procure rice, sugar and other basic food supplies.
- 16 SPLA and SPLA-IO have protection schemes that require teak companies and transporters to pay armed groups for access to teak.

EASTERN EQUATORIA

- 17 Government supports the teak trade including through SSPDF protection.
- 18 SSPDF protection with payments between \$900- 1,000.
- 19 SSPDF armed protection of loggers.
- 20 SSPDF soldiers protect timber traders.
- 21 SSPDF active in timber trade.
- 22 SPLA provides security for teak log transportation to the Ugandan border.

*Collected from UNPOE reports published April 2018-April 2019

In South Sudan, armed groups' access to teak is particularly significant given that these forces are often underfunded.⁶⁶ As a result, local commanders may be forced to rely on accessible commodities to supplement insufficient funding. Teak is particularly attractive because it does not require substantial equipment or infrastructure to be extracted, unlike other resources such as oil. For example, the UNPOE has documented instances in which revenue from teak has been channeled into uniforms, salaries, and other goods required to sustain military operations for SSPDF.⁶⁷ Thus, the sustained presence of armed actors in the Equatorias can be linked to the availability of teak.

The continuing presence of armed groups in teak-cultivating regions, such as the Equatorias, directly impacts the local population. Armed actors in these areas have repeatedly used violence to cement their control over teak and the regions in which it is found. For example, in February 2018, the UN Commission on Human Rights in South Sudan reported that the SSPDF seized teak logs from private farmers in Wau State⁶⁸ as "part of an overall campaign of looting and pillage."⁶⁹ Thus, beyond revenue diversion, violence has become an intrinsic component of South Sudan's teak trade. In another example, in Magwi County (Eastern Equatoria), the South Sudanese non-profit organization Global Empowerment for Poverty Alleviation (GEPA) claims "the interaction of conflict and illegal logging has crippled [the country's] stability, and women have borne the brunt of the effects."⁷⁰ For instance, in a two-month period in 2016, GEPA documented 19 cases of rape against women and girls as they worked on or traveled to logging sites.⁷¹

Despite the clear issues surrounding the teak trade and armed actors in South Sudan, the role of teak in the continuation of conflict receives little attention. This issue, along with limited transparency in South Sudan's teak sector, makes it particularly difficult to determine when teak sold on international markets has funded armed actors.

REGULATORY GAPS IN THE TEAK SECTOR

A lack of clear regulation makes it difficult to distinguish between legal and illegal teak operations in South Sudan. This leads to regulatory gaps which benefit illicit actors in two main ways. First, South Sudan's existing system of allocating land rights is contradictory and lacks transparency that could otherwise deter exploitative practices. Second, the gaps in South Sudan's forestry framework make effective enforcement challenging because illegal practices are not defined. Although civil society, local government, and media reporting describe "illegal" practices and conditions surrounding teak logging, these are not defined within South Sudan's national forestry framework.

Opacity in Concession Ownership

Limited information is publicly available on logging and concession rights in South Sudan. Under the Timber Utilization Act, forests are supposed to be allocated for various uses,⁷² including private sector plantations for the licensed trade of forestry products.⁷³ However, it is unclear to what extent this has been implemented because there is limited publicly available information on the location and borders of concessions, as well as their ownership. For example, some experts claim that South Sudan's forests have not been fully inventoried or mapped.⁷⁴

Even when concession ownership information is available, there can be confusion over which governing bodies have ultimate authority over allocating and managing concessions.⁷⁵ In a 2015 report, USAID described a system in which the legal framework "is ambiguous and tensions between state governments and the [national government] are evident."⁷⁶ Although South Sudan has attempted to institute national forestry policies in 2007,⁷⁷ 2011,⁷⁸ and 2015,⁷⁹ ⁸⁰ this legislation does not sufficiently address issues of competing authority. Overlapping responsibilities have been delegated to states, national park authorities, and communities, creating confusion over who is ultimately responsible for concessions. This impacts the management and sustainability of teak concessions, and creates confusion over their ultimate beneficiaries.

Conflicting land ownership and management rights leave local communities vulnerable to exploitation by commercial actors. Though the Land Act requires that any person with a claim to forested land receive compensation when it is commercialized,⁸¹ this rarely happens in practice.⁸² ⁸³ ⁸⁴ ⁸⁵ Foreign investment in the timber sector, which is incentivized by South Sudan's Investment Promotion Act, compounds this issue.⁸⁶ ⁸⁷ According to the UNPOE, the majority of teak traders in South Sudan are "foreign nationals working without formal concessions or permissions from the Government of South Sudan."⁸⁸ Foreign timber companies logging in South Sudan rarely fulfill community obligations and "take advantage of the country's chaos to extract large amounts of wood."⁸⁹ For example, community development projects promised by foreign companies, including construction of roads and health centers, are rarely completed and do not bring any real benefit to those affected by company operations.⁹⁰ Opacity in concession ownership helps foreign investors evade legal repercussions when they violate obligations to communities.

Note that there is nothing inherently criminal about foreign investment in South Sudanese teak. However, a lack of legal frameworks regulating this sector means that foreign companies often utilize exploitative practices.

Challenges in Defining Illegality

Despite local outcry against exploitative activity in the teak sector, South Sudan's forestry framework does not explicitly differentiate between legal and illegal logging.⁹¹ Still, the term illegal logging⁹² is used repeatedly in local reporting^{93 94} and official statements.^{95 96} to describe ongoing teak exploitation in the Equatorias. According to Samuel Towe, the former Eastern Equatoria Director of Wood, Fuel, and Environmental Protection, "the absence of law, [...] actually gives chance for illegal logging. Even if these illegal loggers are caught, it becomes difficult to pursue them to court because there is no law to punish these people."⁹⁷ Civil society and local government have attempted to counter apparent illegal logging and environmental degradation in the teak sector, including through recent logging bans in Yei River State⁹⁸ and Torit⁹⁹.

As detailed above, ownership of forestry concessions is often unclear and difficult to verify due to a lack of public information on concessions. Without a clear definition of illegality, it is challenging to hold commercial actors accountable if they engage in illegal logging or other exploitative practices.¹⁰⁰ The resulting grey areas can lead to disputes and even violence between industry and communities. For example, female loggers are consistently exploited and subjected to violence, and as GEPA explained, "there are no contracts or proof of employment, and no way to seek recourse."¹⁰¹ In another case, a foreign company operating a teak plantation in South Sudan employed "foreign laborers rather than locals," leading to a community strike that protested the lack of benefit and development for the community.¹⁰² The protest culminated in company employees beating and hospitalizing multiple community members.¹⁰³ Illicit actors also benefit from these grey areas as there are few forums in which their exploitation of logging rights can be seriously enforced.

Highlight:

Corruption in the Teak Sector

South Sudan's teak, like other natural resources, can be co-opted by corrupt government officials, particularly when they have a direct role in managing the resource.

Politically Exposed Persons (PEPs) in South Sudan regularly utilize opaque corporate structures¹⁰⁴ to mask commercial and financial investments, including wealth generated from extractives.^{105 106 107} In its primary natural resource market, oil, South Sudanese officials have been accused of using shell companies and the contract management process to redirect national wealth into private hands.^{108 109 110}

However, South Sudanese legislation bans public officials from owning or profiting from oil or mineral exploitation.^{111 112 113} Although the effectiveness of this legislation has been called into question,^{114 115 116} these provisions are important considering South Sudan has a history of official corruption in natural resource sectors.

Media reports on South Sudan's teak sector detail a system in which local officials can receive or demand payments from teak loggers, in the form of bribes. For example, in 2018 the SPLA/IO-appointed governor of Yei River State, Frank Matata, was arrested after personally profiting from the local teak trade. Governor Matata had solicited a \$30,000 bribe from undercover Kenyan journalist John Allan Namu who was posing as a teak dealer.^{117 118 119} In some cases, corruption in the teak sector may also intersect with financing armed actors. The UNPOE reported in April 2019 that teak traders had been forced to pay bribes to county governments in Morobo, Kajo Kaji, and Yei to arrange for government forces' protection at teak logging sites.¹²⁰

Preventing corruption requires a legal framework that penalizes public officials for abusing their position to profit from natural resource exploitation. Although some laws in the mining¹²¹ and oil sectors^{122 123} include provisions to address conflict of interest and encourage transparency, these have not been fully effective.¹²⁴ However, teak regulations, to the extent that they exist, do not even include these provisions.

Highlight: Convergence with Wildlife Trafficking

Wildlife traffickers also benefit from South Sudan's teak trade. Globally, wildlife trafficking frequently converges with timber trafficking.¹²⁵ In South Sudan specifically, wildlife habitats overlap with teak forests, which leads to obfuscation of wildlife products within teak shipments.¹²⁶ Additionally, teak transport routes out of South Sudan pass through forests and wildlife reserves in the Democratic Republic of Congo (DRC), where poaching and wildlife crimes have frequently occurred.¹²⁷ For example, in December 2016, the Kenyan Revenue Authority (KRA) seized two containers en route to Cambodia via Vietnam.¹²⁸ Upon examination of the containers, KRA found 424 teak beams from South Sudan that were hollowed out to contain 334 pieces of ivory weighing a total of 1.09 tons at an estimated value of \$1.97 million.¹²⁹

South Sudan's wildlife is vulnerable to poaching and trafficking.^{130 131} Teak plantations are located near elephant habitats, and the Equatorias are one of the last remaining homes for critically endangered forest elephants.¹³² For instance, a 2019 European Commission study documented armed groups involved in both the trafficking of ivory and natural resources across South Sudan's border.¹³³ Furthermore, in January 2019, the Uganda Revenue Authority (URA) seized over 700 pieces of ivory (from about 325 elephants) and pangolin scales hidden in logs that crossed into Uganda from South Sudan.^{134 135 136}



KRA seizes shipment of teak logs concealing 1.09 tons of ivory. Source: Coastweek

INTERNATIONAL DEMAND FOR SOUTH SUDANESE TEAK

International demand for teak has exacerbated underlying issues plaguing South Sudan's teak sector, which is already at high risk for exploitation given conflict and low regulation in the country.

Teak has traditionally been sourced from naturally-occurring teak forests in Myanmar, Laos, Thailand, and India.¹³⁷ However, high international demand has caused unsustainable logging of teak in these countries, forcing a number of them to implement logging bans.^{139 140 141} Importing markets have therefore been forced to meet growing demand with plantation teak from Latin American and African countries, including South Sudan.¹⁴² The increased demand for South Sudanese teak has fueled the same type of unsustainable deforestation.^{143 144 145 146} Already South Sudan has taken steps to curb “an alarming depletion of natural and man-made tree cover” by banning logging in some states.¹⁴⁷ Still, South Sudan's teak sector has attracted foreign investors and left space for illicit actors to exploit the sector.

Even though South Sudan's teak is a valuable global commodity, limited information is available on South Sudan's teak exports and revenue. Knowledge gaps begin at the ground level, where even “the exact area covered by teak plantations is unclear.”^{148 149} Public reporting on the South Sudanese teak market is also limited, and figures that do exist appear to be low. For instance, a 2018 estimate based on interviews conducted with three individuals suggests that South Sudan's teak industry is currently valued at \$10 million to \$11 million per year.¹⁵⁰

C4ADS set out to analyze South Sudan's teak sector to understand the true size, value, and key actors of this market. Because trade data from South Sudan is not currently publicly available, C4ADS structured and analyzed trade data from critical import-export countries along the teak supply chain. In this section, we used trade data from Uganda and India to quantify demand for South Sudanese teak in international markets and identify who profits from this trade.

Uganda's Teak Market

Because South Sudan is landlocked, it must rely on its neighboring countries to move goods out of the country. Teak is usually transported by truck out of South Sudan through Uganda, the DRC, and Kenya, where it is then sold into other international markets.¹⁵¹ Taking approximately two weeks, trucks carrying teak logs typically transit through Uganda, often by routing through the northern DRC.¹⁵² After reaching Uganda, the teak may undergo additional processing before being exported to its destination country after passing through Kenyan ports.¹⁵³

Uganda is Africa's largest teak exporter.^{154 155} However, Uganda has virtually no domestic production of teak.^{156 157} Uganda is also the main importer of South Sudanese teak. C4ADS analyzed Ugandan import-export data in an effort to better understand the critical trade relationship between South Sudan and Uganda.

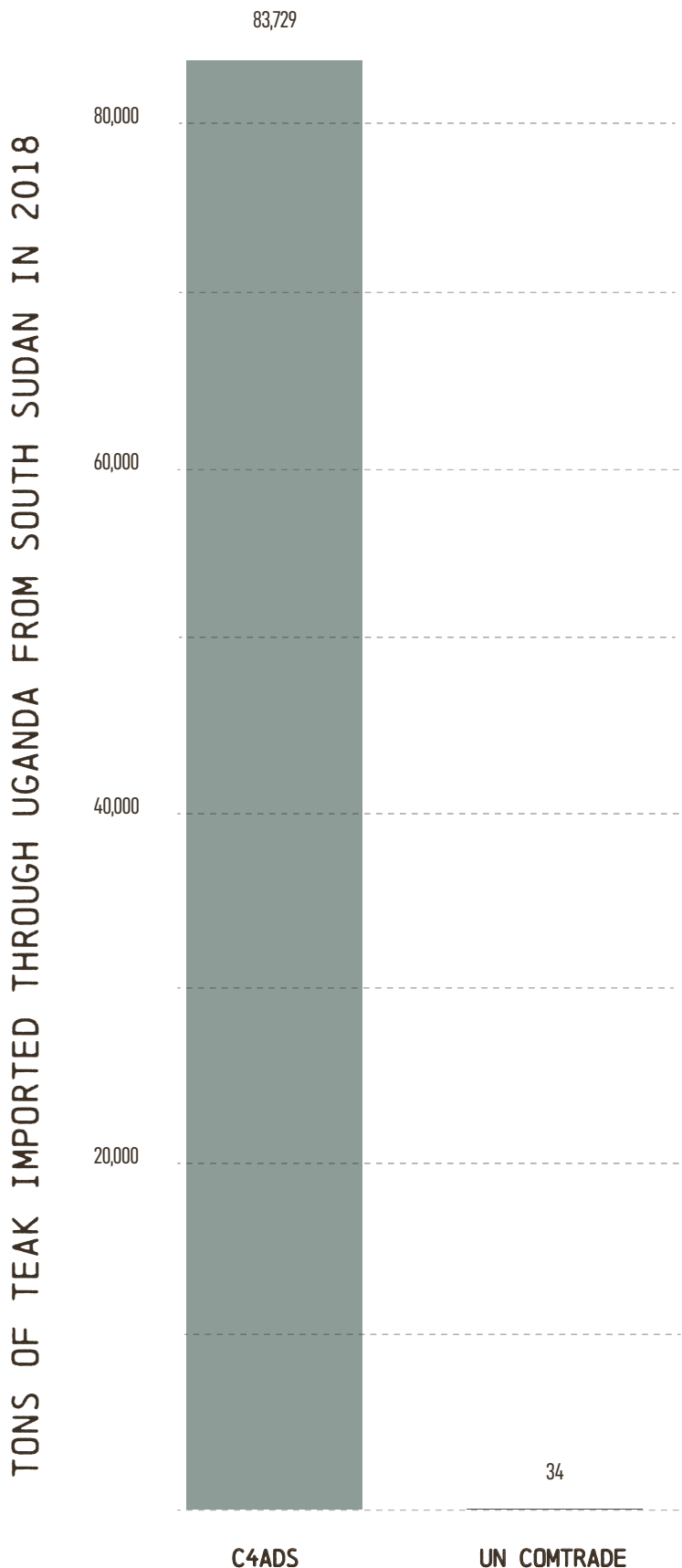
According to Ugandan trade data reviewed by C4ADS, when South Sudanese teak is exported from Uganda into international markets, it is frequently misreported as Ugandan teak. One UNPOE report states that the large majority of teak exports from Uganda during the first nine months of 2018 likely originated from South Sudan.¹⁵⁸ Some researchers also claim that some teak felled in South Sudan is misreported as originating from the DRC.¹⁵⁹



The issue of misreporting trade flows of South Sudanese natural resources is not unique to teak. According to a 2019 report, most South Sudanese gold is moved illicitly across the border to Uganda.¹⁶⁰ South Sudanese gold sold in Uganda is often misreported as Ugandan because "South Sudan does not produce certificates of origin."^{161 162}

Export data reported by international organizations for teak in Uganda and other East African countries are low compared to trade data collected by C4ADS. For example, C4ADS data for 2018 contained at least 1,980 shipments of teak that passed through Uganda, with a total weight of 121,677 tons. During that same period, C4ADS determined that over 55% of the teak transiting through Uganda was reported as South Sudanese with a total weight of 83,729 tons.^{163 164} In contrast, UN Comtrade data reports that, in 2018, Uganda only imported a total of 34 tons of teak from South Sudan.^{165 166} This value for South Sudanese teak imported to Uganda in 2018 is 2,462 times less than the value for the same figure found by C4ADS.

Even C4ADS's teak export estimates are likely low, in part because South Sudanese teak is often misreported as originating from the DRC.¹⁶⁷ Of the Ugandan trade data analyzed by C4ADS, approximately 44.7% of shipments¹⁶⁸ are listed as originating in the DRC, while approximately 55.2% originated from South Sudan. While the DRC has extensive forested areas, there are few known teak forests within the country.^{169 170 171} This further calls into question the accuracy of these trade data estimates as it is unclear how much teak reported to be from the DRC originated in South Sudan.



Because border crossings between South Sudan, Uganda, and the DRC can be informal, shipments crossing these borders are usually not taxed by the government of South Sudan.¹⁷² This represents a loss of revenue for the country.

Mirroring how teak loggers are forced to pay bribes to armed groups, teak shipments crossing the South Sudanese border are often subject to payments imposed by South Sudanese and other armed groups at particular checkpoints.¹⁷³ These payments often take the form of protection fees or informal taxes from armed groups.¹⁷⁴ A UNPOE report from 2019 notes multiple instances of the South Sudanese armed group SPLA-IO¹⁷⁵ taxing timber shipments as they moved to Uganda and the DRC. The SPLA-IO also reportedly “established a number of illegal checkpoints along transit routes in these areas.”¹⁷⁶

Diversion of revenue from the nation of South Sudan is caused by misreporting of the origin of South Sudanese teak, a lack of taxation at borders, and payments to armed groups. According to the Ugandan trade data examined by C4ADS, from January 2018 to March 2019, Uganda generated approximately \$3.2 million in export tax revenue from South Sudanese teak in just 14 months, and \$2.6 million in 2018. Meanwhile, in South Sudan, teak exports only generate between \$1 to \$2 million per year in tax revenue.¹⁷⁷ While Uganda does not have domestic teak production, Uganda appears to profit more from South Sudanese teak than the government of South Sudan itself.¹⁷⁸

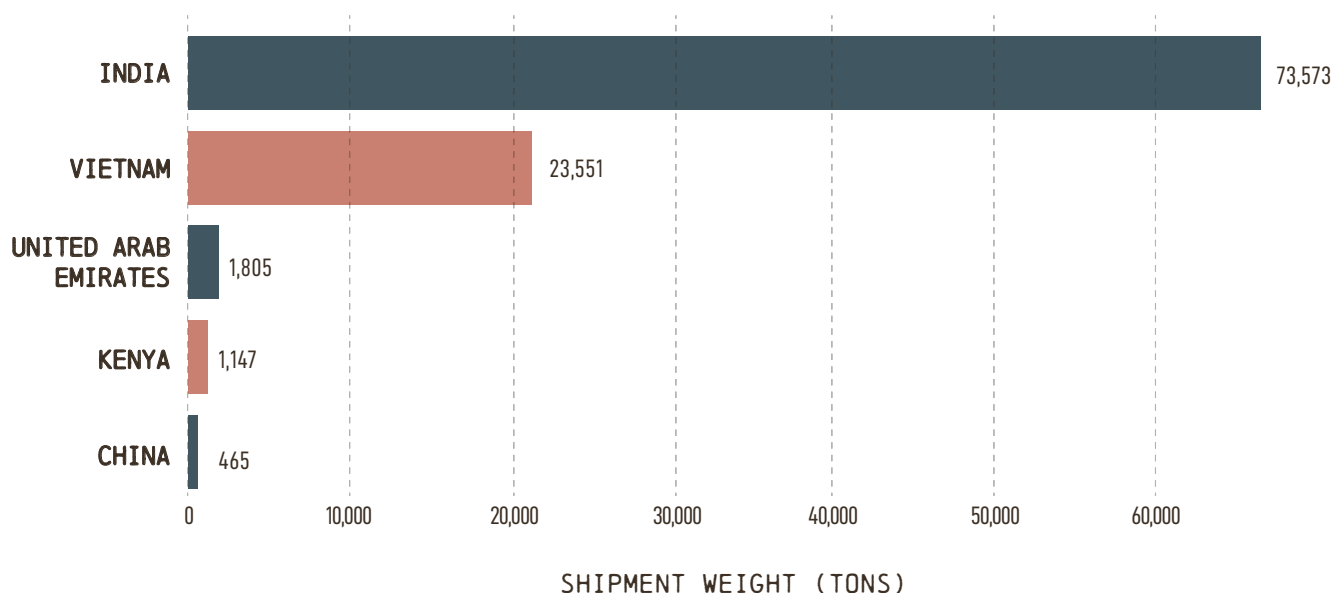
Due to generally informalized trade relationships and a lack of available trade data, it is unclear what portion of the South Sudanese teak trade goes unreported as it flows through Uganda. To further understand the possible size and value of South Sudan's teak trade, C4ADS analyzed trade data from destination markets of South Sudanese teak.

India's Teak Market

C4ADS analyzed teak shipments that were declared as South Sudanese and were subsequently exported from Uganda onto destination markets. Between January 2018 and March 2019, India was the single largest destination for South Sudanese teak routed through Uganda by shipment weight. This logically flows as most East African teak is exported to Asia.¹⁷⁹

It is unsurprising that India is the largest consumer of South Sudan's teak. Although India has the largest planted teak forests in the world, the country's growing demand for teak has led India to become the biggest teak importer in the global market.¹⁸⁰ According to an FAO report, one of India's main sources of teak was previously Myanmar, the largest producer of teak in the world.¹⁸¹ Global demand for Myanmar teak led to high levels of deforestation within the country and illegal teak exports,¹⁸² resulting in a 2014 log export ban.¹⁸³ ¹⁸⁴ As a consequence of Myanmar's ban, India has been forced to meet its growing teak demand with timber from African and Latin American countries.¹⁸⁵

WEIGHT OF SHIPMENTS OF SOUTH SUDANESE TEAK BY DESTINATION COUNTRY IN 2018



C4ADS analyzed Indian import data from January 2017 through July 2019 to better understand the teak trade between Africa and India. The trade data analyzed included imports from the DRC, Kenya, Uganda, and Sudan. Indian trade data does not use the term "South Sudan" and only lists "Sudan" for both countries. This is also reflected in online market places, where Indian suppliers only post listings of "Sudan teak."¹⁸⁶ Additionally, Sudan does not have a significant teak trade, teak forests, or teak plantations.¹⁸⁷ Therefore, this analysis treats teak labeled as originating from Sudan as South Sudanese teak.

Of Indian teak imports from East Africa in 2018, 89% were reported as originating in South Sudan.¹⁸⁸ The total declared value of these shipments was \$30,527,724 with a total weight of 40,296 tons.¹⁸⁹ Comparatively, the second largest exporter of teak shipments to India was Uganda with 25 shipments, with a total weight of 517 tons¹⁹⁰ and total declared value of \$412,163. Considering Uganda's lack of domestic teak forests and the issue of misreporting, this suggests that the total value of South Sudanese teak being exported to India may be even higher than what is represented in the trade data.

C4ADS's estimates based on international trade data may reflect a more accurate representation of the potential value of South Sudan's teak trade. However, it is important to note that, although this data was analyzed using HS codes that correspond to teak,¹⁹¹ it is possible that shipments with these HS codes included other timber of different timber species. Therefore, although these HS codes were used as a best approximation to most closely estimate the size of the South Sudanese teak trade, inconsistency in usage of HS codes may have impacted the figures calculated during the course of our analysis. As we are unable to account for misreporting, these numbers likely still undervalue the South Sudanese teak trade.

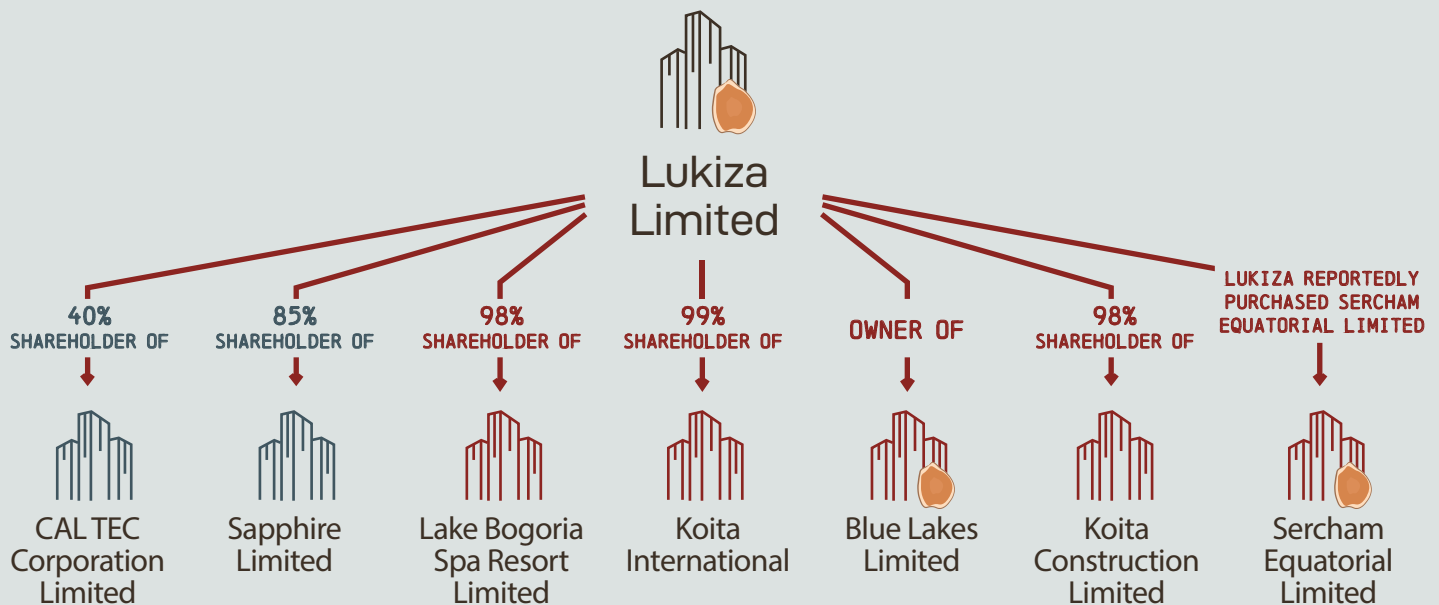
Who Profits from South Sudanese Teak?

Teak could serve as a source of sustainable revenue for South Sudan. The United Nations Environment Programme has estimated that "existing teak plantations alone could potentially generate up to \$50 million per year in export revenue" for South Sudan.^{192 193} In 2015, the Ministry of Environment of South Sudan projected that "teak plantations alone [could] generate over \$100 million per year."¹⁹⁴ However, C4ADS analysis shows that misreporting, informal trade, and coercive payments divert a significant amount of the financial benefits of teak from South Sudan.

Revenue from teak is instead collected by neighboring countries, South Sudanese armed groups, and foreign investors. Furthermore, the current structure of the South Sudanese teak sector means that local communities often suffer the consequences of limited regulation and exploitative practices. As a result, revenue from teak is diverted from South Sudan while illicit and exploitative actors profit.

CASE STUDY

LUKIZA LIMITED



BLUE: Gideon Moi given power of attorney in June 2010 | RED: Other subsidiary relationship

ANALYSIS POWERED BY

Palantir



Indicates commercial involvement in teak

Powerful foreign actors are able to exploit underregulated and profitable natural resource trades such as teak because of deficiencies in how the sector is managed. The following case study illustrates the involvement of Kenyan elites in South Sudan's teak sector.

Lukiza Limited and two of its reported subsidiaries have operated teak companies in Eastern and Western Equatoria since 2005, and have exported teak through at least February 2019. According to South Sudanese corporate records, Kenyan Senator Gideon Moi, the son of former Kenyan President Daniel Arap Moi, was a 60% shareholder in Lukiza Limited between 2010 and 2016.¹⁹⁵ Because Kenya is a gateway for South Sudanese teak entering global markets, Gideon Moi's political stature may lend him undue influence in South Sudan's teak trade.

The Moi Family and the Lukiza Limited Network

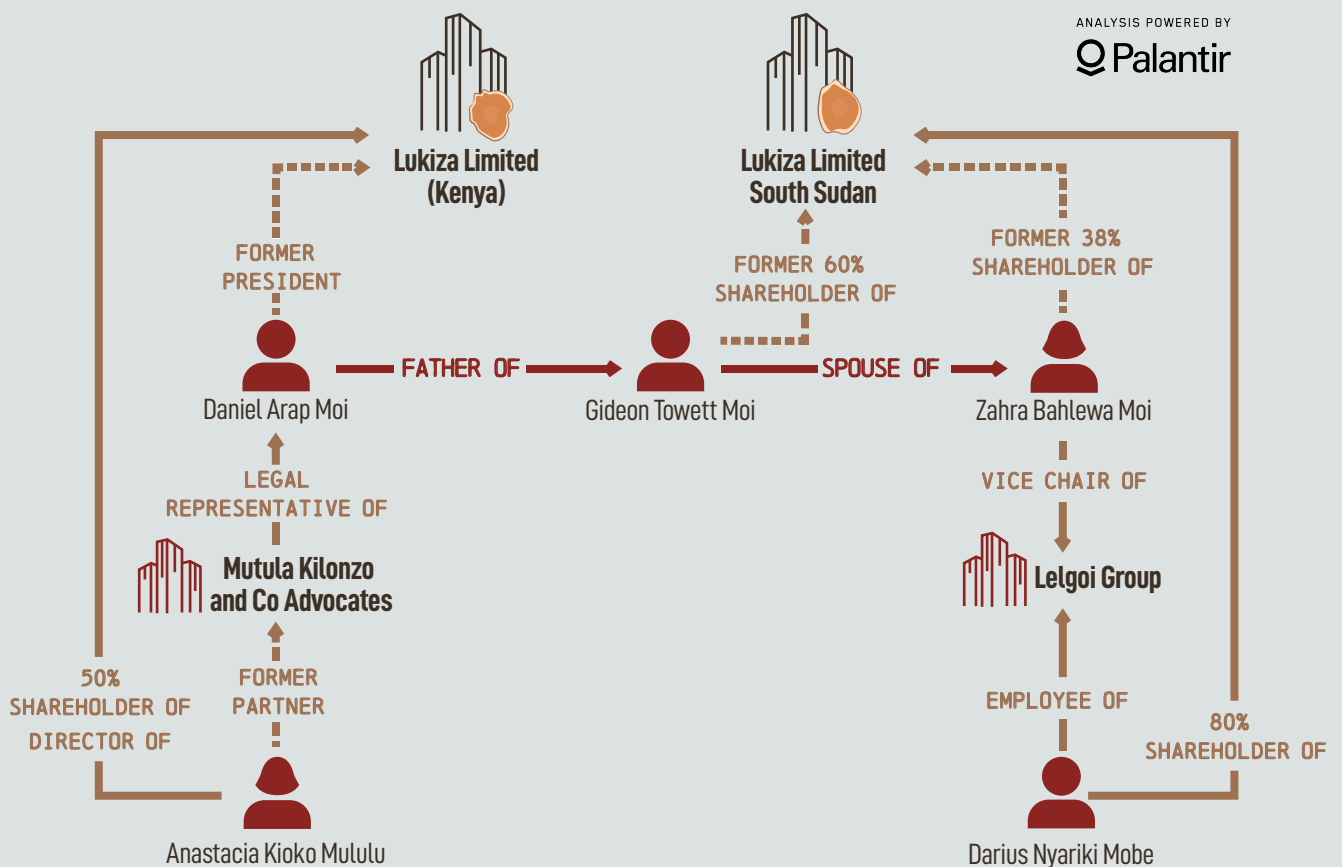
According to South Sudanese corporate filings from 2010, Gideon Moi was the founder and majority shareholder (60%) of Lukiza Limited, alongside his wife Zahra Moi (38%).¹⁹⁶ While a shareholder of Lukiza, Moi held various political positions, including Vice Chairman of the Kenya African National Union (2008 – 2013) and Senator for Baringo County (2013-2017).¹⁹⁷

Lukiza Limited's corporate relationships within South Sudan and abroad only become apparent through examining corporate records from South Sudan, Kenya, and Uganda. Through at least seven subsidiaries, Lukiza Limited has operated in half a dozen industries in South Sudan including real estate,¹⁹⁸ financial services,¹⁹⁹ waste management,²⁰⁰ and airplane services.²⁰¹ In addition, Lukiza Limited and its reported subsidiaries also have affiliates incorporated in Kenya and Uganda.

South Sudanese corporate records show that Gideon Moi played a role in the Lukiza network, including in June 2010. In addition to being the majority shareholder, corporate records from June 2010 state that Moi was appointed by Lukiza Limited's Board of Directors "to be our true and lawful attorney." This appointment reportedly enabled him to hold shares on behalf of Lukiza Limited in five South Sudanese companies, including two involved in the teak sector: Blue Lakes Limited and Sercham Equatorial Limited.²⁰²

Kenyan and UK corporate records further state that the Kenyan affiliate of Lukiza Limited is 50% held²⁰³ by a business partner of Gideon and Daniel Arap Moi in a separate UK company, Zehrabanu Mohamedtaki Janmohamed.²⁰⁴

Corporate records reviewed by C4ADS show that Moi was removed as a shareholder in 2016.²⁰⁵ In October 2019, Gideon Moi denied owning Lukiza Limited, saying, "I am not a shareholder of the company"^{206 207} after The Sentry reported that he continued to hold shares in Lukiza Limited. It is unclear if his statement was intended to refute any former ownership or role in the company.



Lukiza Limited's Role in South Sudan's Teak Trade

Between 2005²⁰⁸ and 2019,²⁰⁹ Lukiza Limited and its subsidiaries, Blue Lakes Limited and Sercham Equatoria Limited, reportedly harvested South Sudanese teak and exported it through Uganda and Kenya onto global markets. All three companies claim to have operated at least one teak concession each in the Great Equatoria region as detailed in academic papers and media reporting.²¹⁰

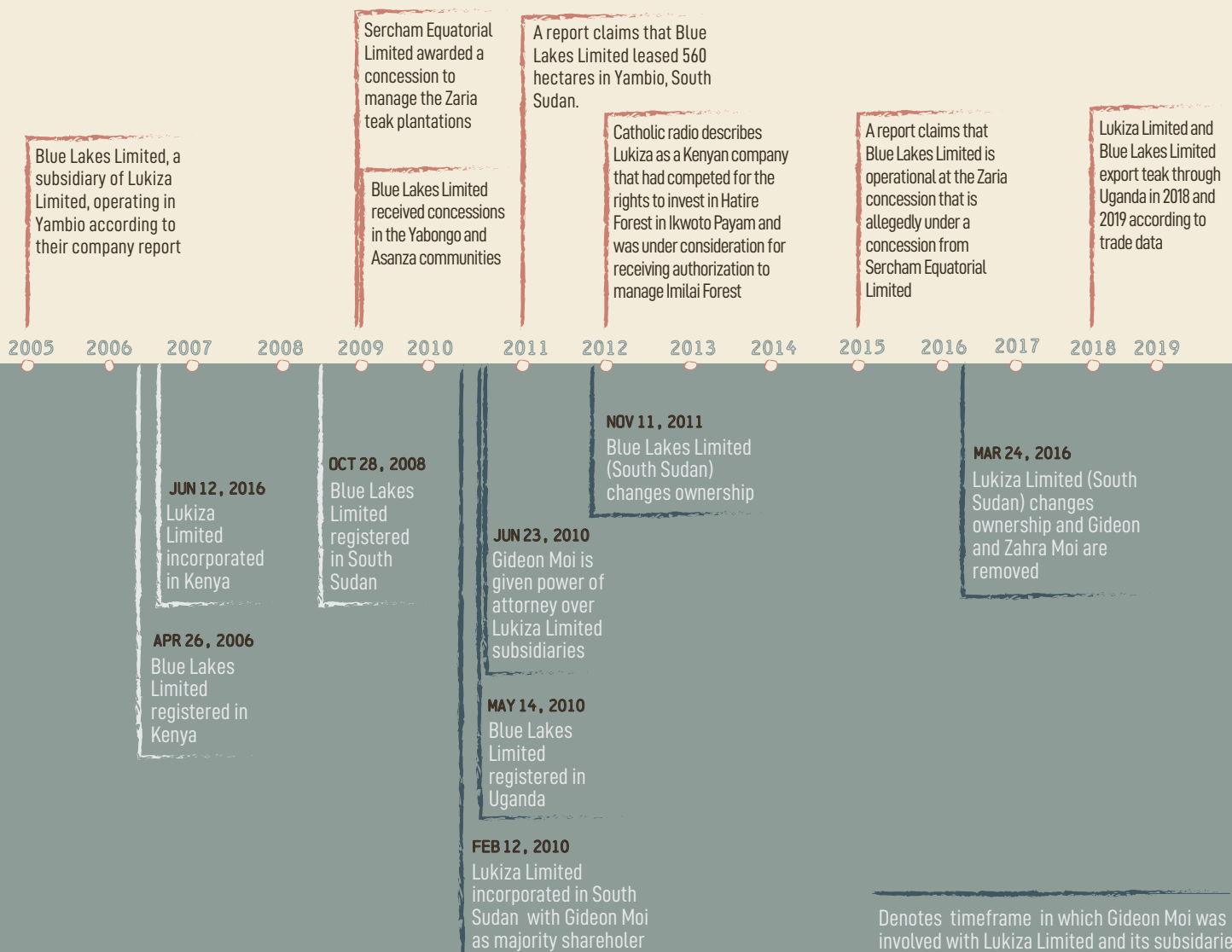
Of Lukiza Limited's affiliated companies, Blue Lakes Limited received forestry permits, based on available reporting.²¹¹ According to a company report, Blue Lakes Limited may have received teak concessions starting in 2005 and may even have a sawmill in South Sudan.^{212 213}



Logos of Lukiza Limited and Blue Lakes Limited

TEAK OPERATIONS

MOI FAMILY OWNERSHIP



Soon after South Sudan's independence, Blue Lakes Limited reportedly entered a land lease agreement negotiated in 2008 for 560-hectares²¹⁴ of a forest in Yambio.²¹⁵ As part of this public-private partnership, Blue Lakes agreed to allocate \$200,000, plus a royalty payment for every cubic meter of teak exported, to a local community social fund in Western Equatoria.²¹⁶ Public-private partnerships of this nature have faced scrutiny for a history of unfulfilled commitments to local communities.^{217 218} While it is unclear whether Blue Lakes Limited fulfilled its commitments as part of the land lease agreement, trade records indicate that the company, alongside Lukiza Limited, continue to export South Sudanese teak to India through Uganda.

Ugandan trade records²¹⁹ show that Lukiza Limited and Blue Lakes Limited likely exported South Sudanese teak from Uganda to India in 2018 and 2019. During this time, Lukiza Limited reportedly exported 21 shipments with a total estimated weight of 2,464 tons and Blue Lakes Limited exported 6 shipments with a total estimated weight of 44 tons. Although this data only captures a fraction of South Sudan's teak trade, it suggests that Lukiza Limited was the 11th largest exporter by weight of South Sudanese teak through Uganda in 2018 and 2019.

Links to Politically Exposed Persons

Gideon Moi, through Lukiza Limited, has reportedly had several business relationships with South Sudanese Politically Exposed Persons (PEPs).²²⁰ These business relationships could grant Moi improper access to politically influential people that can impact business dealings and the allocation of government contracts. In one case, Lukiza Limited's subsidiary, Caltec Corporation Limited, reportedly has a joint venture with South Sudanese President Salva Kiir's daughter, Adut Salva Kiir.²²¹

In addition, while Moi was the majority shareholder, Lukiza Limited was linked to the former governor of Eastern Equatoria, a major teak producing region, through a variety of business dealings. For example, South Sudanese corporate records show that at one time Lukiza Limited and the former governor's wife jointly owned a company, Sapphire Limited.²²² Soon after Sapphire Limited's incorporation, another subsidiary of Lukiza Limited reportedly began doing business with the former governor, Louis Lobong Lojore.²²³ While he was governor, Lojore selected a Lukiza subsidiary to jointly own a hotel with the government of Eastern Equatoria.^{224 225 226}

Far from being limited to South Sudan, the Moi family has been accused of profiting from private businesses across East Africa in the past.^{227 228 229} Still, the family's involvement in Lukiza Limited and its subsidiary network is not immediately apparent. This is at least in part due to lax regulation and inadequate transparency within sectors like teak. It is also important to understand that these business dealings have occurred in an environment of sustained conflict,^{230 231} which aggravates the underlying issues associated with natural resource exploitation.

CONCLUSION

Due to a variety of factors, the profits of the South Sudanese teak trade have been co-opted by illicit actors and political elites. Ongoing conflict in the country exacerbates many of the issues that contribute to the exploitation of the teak sector and prevents effective governance. Furthermore, a lack of transparency and regulation allows for the unencumbered involvement of armed groups and other illicit actors. This trade is further fueled by growing international demand and exploitative foreign investment.

If managed correctly, teak presents an opportunity for a sustainable revenue source that could benefit both South Sudan's economy and local communities. This is particularly important given the country's reliance on oil revenue. Currently, conflict finance is so intertwined with the teak trade that international consumers have no way to determine whether South Sudanese teak has contributed to sustaining conflict in the country. If left unchecked, unregulated and unsustainable logging will decimate remaining teak reserves and will deprive endangered wildlife of important habitat. In the meantime, the profits of this natural resource solely benefit political elites.

Issues in South Sudan's teak trade are representative of larger global challenges that occur within natural resource sectors. High-value natural resources are vulnerable to exploitation due to high profit margins and regulatory grey areas. Illicit actors thrive in these grey areas, preventing local communities from protecting their rights to resources like teak. As a result, natural resources are co-opted by a variety of illicit actors, including armed groups, illegal loggers, wildlife traffickers, and corrupt officials. This results in convergence across many types of crime.

Regulation to address grey areas is an essential first step in deterring the presence of illicit actors in natural resource sectors. While there are a number of limiting factors on South Sudan's capacity to address these issues, several key steps may deter illicit actors in the teak trade. Issues of transparency could be addressed through concession mapping and access to public records (including concession rights and company ownership). Issues within South Sudan's legal framework could be addressed by deconflicting responsibilities in the national forestry policy, clearly delineating between legal and illegal practices, and creating implementing regulations where laws already exist.

International demand and investment have continued to grow without regard for the human impact posed by the South Sudanese teak trade. Conflict within other natural resource supply chains has been addressed several times before, with varying degrees of effectiveness, recognizing that international demand should not fund conflict. International markets have an obligation to ensure that they responsibly invest in South Sudan's teak without contributing to financing armed groups. There is likely a role for international organizations like the International Tropical Timber Organization (ITTO) and others to play in encouraging destination countries of South Sudan's teak to employ responsible practices.

In the end, local communities are the ones who bear the consequences of illicit actors exploiting South Sudan's teak. Moreover, natural resource exploitation should also be thought of as a human security issue and not only as a matter of environmental degradation. Until these problems are addressed, the conditions of South Sudan's teak trade will continue to deteriorate.

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