RESEARCH REPORT



MYANMAR'S ILLICITIYBER

Flows, drivers and actors

PREM MAHADEVAN

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ACRONYMS AND ABBREVIATIONS

BRI	Belt and Road Initiative
BGFs	Border Guard Forces
CMEC	China-Myanmar Economic Corridor
GI-TOC	Global Initiative Against Transnational Organized Crime
KIA	Kachin Independence Army
MTE	Myanma Timber Enterprise
NLD	National League for Democracy
NDAK	New Democratic Army-Kachin
OA	Other account
UWSA	United Wa State Army



In Kachin state, Myanmar, timber used to be transported on buffalo-drawn carts. © Hulton-Deutsch Collection/Corbis via Getty Images

EXECUTIV SUMMAR

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COMMERCE

Teak logs are hauled through Yangon. Under Myanmar law, all timber must pass through the port of Yangon. There is evident violation of this law. © Udo Weitz/Bloomberg via Getty Images

imber trafficking from Myanmar to China is responsible for the rapid degradation of natural forests. Illegally harvested wood is used for construction and to manufacture luxury furniture, but, with China's own forest reserves being protected, the environmental cost of such profitable economic activity is borne by its southern neighbour. For its part, Myanmar has been too heavily dependent on revenues from timber exports, especially teak, to be able to resist the Chinese market – or that of the European Union, for that matter. While it is tempting to place responsibility on China for the deforestation problem that Myanmar faces, a closer look reveals that cross-border partnerships between Chinese and Myanmar businesses, overseen by government officials on both sides and with qualified participation of some armed groups, have together created a trafficking economy.

This report identifies the routes and various actors that play a role in these illicit flows and the transformation process as product moves through the supply chain from source to end markets. About 80% of Myanmar's illegally logged timber is reportedly smuggled to China and India, with China most likely accounting for the lion's share of these flows. From the state of Kachin in Myanmar to China's Yunnan province, on the adjacent side of the border, the illegal timber trade is estimated to be worth US\$600 million a year (more of which later in the report). Under Myanmar law, all timber exports must exit through the port in Yangon, and overland timber trade is illegal. However, Myanmar's porous eastern border with the Asian giant has long facilitated movement of illicit timber into south-western China, as have arrangements between complicit actors on both sides.

If one examines the dynamics of Myanmar's transnational timber flows more closely, the hardwood forests of the Saigang region bordering India's easternmost boundary appear to be the source of most illegally harvested timber, including globally highly sought-after 'Burmese teak'. From the Saigang logging regions, three main flow routes have been identified. One is west to India, the largest market after China, fuelled by demand across the border. Another transport route heads upriver along the Irrawaddy to two timber hubs, whence the wood is transported by road across Kachin to the Chinese border. A third route, which appears to be gaining prominence, is downstream to Mandalay, from where the product is then transported to the Muse-Ruili border crossing with China (refer to the map on page 20 for more detailed information on these routes). Besides China and India, there are other sizeable transnational flows as Myanmar hardwood is supplied to the 'legitimate' overseas timber industry for processing and retail. The EU and the US are two other major markets for Myanmar luxury timber. Research undertaken recently by the Environmental Investigation Agency estimates that the total value of global imports of timber products from Myanmar to the EU between 2018 and 2020 was US\$149 million; to the US, the three-year figure for the equivalent period was US\$46.7 million. International demand for luxury wood reportedly drives these illicit flows.¹ Many of the shipments to the EU markets are reportedly out of the Ahlone port terminal in Yangon.²

This report identifies some of the main actors allegedly enabling illicit flows. In brief, the Myanmar military have facilitated and profited from the trade for some time, including participation in the illegal trade to China. Other actors allegedly include figures in government, state-owned entities, companies with links to the military and private timber sourcing companies based in Europe.³ Systems of bribery and subcontracting may well lubricate exports of teak, violating domestic and international laws, including legislation in the EU and US.⁴

As COVID-19 has disrupted or displaced much international trade, both licit and illicit, the logging trade in Myanmar appears to continue to flow along the supply chain, with product destined for lucrative overseas markets, despite international efforts, such as targeted sanctions, to stem activity and cut off the proceeds reaching the country's military junta actors. In the case of some export markets, shipments may even be rising.⁵

The report also traces how the illicit timber trade has changed over time as some actors have lost ground, both physically and financially, to competition from elements within the Myanmar military. The 2021 coup in Myanmar is expected to lead to strengthened ties between business communities on both sides of the border, with the province of Yunnan continuing to play its traditionally instrumental role in mediating illicit transactions between China and Myanmar.

Illegality is determined in Myanmar by the location at which a particular tree is felled, the purpose for which it is felled, whether its wood is processed through a sawmill and from where it is exported. With so many qualifying criteria, it is unsurprising that considerable space exists for illegality and corruption. Rather than gang-like mafia organizations, what one sees in Myanmar is a metamorphosis from illegal to legal activity as a piece of timber travels along the supply chain.

Our findings suggest political cronyism as being as relevant to the timber trade as it is to other markets for illicitly sourced and traded commodities in South East Asia. The political situation in Myanmar, even the state of ceasefires between government forces and ethnic armed groups, has an inescapable impact on the timber trade. Under conditions of conflict and uncertainty, commercial enterprises from Yunnan have extracted vast quantities of resources from Myanmar. The international community thus needs to take an active interest in working with the Chinese government to reduce timber trafficking, supporting legitimate sections of the Myanmar timber industry, building up civil society and investing in rule-of-law initiatives.

INTRODUCTION THE SIGNIFICANCE OF THE SINO-MYANMAR ILLICIT TIMBER TRADE

Gong Shan, in China's Yunnan province, is a trans-shipment point for timber illicitly exported from Myanmar. © Jerry Redfern/LightRocket via Getty Images

llicit flows of timber destined for China have vastly degraded Myanmar's forests. Poor governance, erratic law enforcement and a lack of focus on environmental crime have contributed to an ongoing illegal trade in timber, notably teak (*Tectona* grandis), Burmese rosewood, or tamalan (*Dalbergia oliveri*) and padauk (*Pterocarpus*). The Sino–Myanmar timber trade is integral to larger illicit economies in the region, which includes the notorious Golden Triangle: the opiate-producing trijunction of Myanmar, Laos and Thailand. From this perspective, analyzing the dynamics of Myanmar's illegal timber trade with China is critical to understanding the role of government and non-government responses to reduce the threat of transnational organized crime more broadly.

Worldwide, illicit logging accounts for 15–30% of all timber harvested, with a turnover estimated at US\$100–150 billion.⁶ Such estimates are speculative because most logging (whether illicit or otherwise) tends to occur in remote areas with weak political governance and economic regulation.⁷ In these landscapes, different types of criminality often overlap in the same sparsely governed spaces. There are usually multiple actors involved: subcontractors cut down trees in protected areas (such as wildlife sanctuaries); sawmill operators mix the illegally cut wood with legitimate stockpiles; railway and shipping officials and highway police oversee its transportation; corporate lawyers and accountants represent the multinational companies that trade in shipments of wood that might not all have been legally harvested.⁸

In this global context, there is a need to understand the drivers of Myanmar's illicit timber trade in particular. The trade has a negative impact on Myanmar's economy and environment, with the latter suffering significantly through uncontrolled logging. A GI-TOC interviewee in Myanmar's northern Kachin state, living close to the border with China, has observed illegal logging over the last 10 years denude the area near his home town of any trees of commercial value. According to him, whatever trees are still standing have little worth from a business perspective, which has led to a



Subcontractors cut down trees in protected areas (such as wildlife sanctuaries)



Sawmill operators mix the illegally cut wood with legitimate stockpiles



Railway and shipping officials and highway police oversee its transportation



Corporate lawyers and accountants represent the multinational companies that trade in shipments of wood that might not all have been legally harvested

FIGURE 1 Actors in the illicit transnational timber trade.

drop in logging.⁹ Notably, government policies and enforcement efforts seem to have played little role in the decline of the trade. Currently, the most valuable timber being illicitly harvested is teak that is sourced from the Sagaing region near India and then transported across Myanmar to China. It is in the transportation phase, not the actual harvesting, that many stakeholders make their profits.¹⁰

At the point of origin, where timber is harvested at locations and times without government authorization, the Sino-Myanmar illicit wood trade has 'mafia-like' territorial and intimidatory qualities. However, the further this timber progresses along the supply chain, the more its transportation and associated transactions take on the character of economic crime. The GI-TOC has not yet found evidence of internationally recognized organized crime groups, such as the Chinese triads, being directly involved in the Myanmar timber trade at the point of extraction. In part, this is because such groups have their strongest support networks in China itself and, while these certainly extend across the border into Myanmar, their influence might not run very deep in the peculiar ethnic cauldron of Myanmar's border areas. One possible wild-card factor is the February 2021 coup, which is thought to have increased ties between the Myanmar military and its affiliated Border Guard Forces (BGFs) and Chinese organized-crime figures.¹¹

The report provides a timeline of the illicit logging sector in Myanmar, highlights the drivers of demand, maps the geography of timber trafficking and examines the categories of actors involved. The last part especially highlights the importance of government complicity in the trade, on both sides of the China–Myanmar border. Research for this report draws on a range of primary and secondary English, Burmese, Chinese and Thai language resources, as well as in-depth interviews with analysts, businesspeople, government officials and community representatives familiar with the borderlands. All interviews were conducted in March 2021.

5

OPENING OUT MYANMAR'S FORESTS TO FOREIGN COMPANIES

Myanmar has one of the highest deforestation rates in the world, partly driven by its illegal timber exports to countries such as China and India. © Thierry Falise/LightRocket via Getty Images

fter 1948, when Myanmar gained independence from Britain, it relied on timber exports to stem the effects of a slow economic decline. The military seized power in 1962 and a one-man socialist dictatorship under army chief Ne Win came into being. The dictatorship continued until 1988 when an abortive pro-democracy uprising led the military high command to switch authoritarian styles. Power no longer came to be exercised by a single personality, but collectively by a small core of top-ranking generals. International condemnation and diplomatic isolation after 1988 accelerated the country's dependence on timber exports as a revenue earner. Rattled by the popular protests of that year, which had partly been provoked by economic mismanagement, the military regime opened Myanmar's forests to foreign companies. This meant that such companies could, after receiving permission from the regime, harvest wood from the forests and transport it back to their country of domicile (which in most cases, meant Thailand). The state-run Myanma Timber Enterprise (MTE) was granted authority to regulate logging by the newly emerging but largely foreign-owned private sector. A number of Thai firms rushed to obtain logging concessions and the rate of deforestation quadrupled. The firms were almost all owned by Thai military officers or their associates. Within months of these concessions in Myanmar being granted, the Thai government banned logging inside Thai territory. This had the effect of hugely increasing the commercial value of the concessions in Myanmar, while also exporting the environmental damage caused by Thailand's own demand for wood, to Myanmar.¹² The new (Thai) entrants to Myanmar's timber economy either bought wood directly from MTE or were subcontracted to harvest trees on its behalf. They formed the nucleus of Myanmar's 'timber mafia', despite not being organized-crime actors in the classical sense of the term.

Another factor was so-called 'ethnic armed organizations' or rebel groups, some of which have been fighting the Myanmar state since independence. Due to Myanmar's ethnic diversity, the potential for conflict has always been there. During the Second World War, the British played upon ethnic tensions to arm minority groups to fight the Japanese occupiers and their Bamar collaborators (who also turned against the Japanese in the later years of the war). As a result of the polarization that occurred within society, the newly independent country inherited a fractured polity with fault lines that deepened during the socialist phase of military rule (1962–1988). Today, there are estimated to be around 20 ethnic armed organizations in Myanmar.¹³

Some of these organizations were willing to cooperate with the foreign investors who entered Myanmar's logging sector after 1988. It was they, rather more than the Myanmar government, that enabled the cross-border flow of timber into Thailand in the late 1980s and early 1990s. MTE largely concentrated on selling to more distant markets, but the illicit trade in timber featured heavy involvement of ethnic armed organizations, who also took it upon themselves to award logging concessions.¹⁴ Since these were rebel groups, whatever concessions were handed out by them to foreign timber companies had no status under Myanmar law since they were not awarded by the official state machinery.

Although Thais dominated the first couple of years of the investor rush into Myanmar's logging sector after 1988, there were others as well. Among these latter was a Chinese national called Cheng Pui Chee. Chee, who died in 2018, has been called the 'shadow president' of the Myanmar teak trade. Chee allegedly bought logs that had been falsely graded by forestry officials as being of low quality, thus allowing them to be priced far below their true market value. They were then sold on to companies in the United States and the European Union, possibly with the help of intermediary firms based in Singapore, Malaysia and Taiwan.¹⁵

Chee owned a Hong Kong-based company called Cheung Hing, one of the biggest teak firms in Asia. Among its shareholders was a Myanmar national called U Tay Za (sometimes written as Tay Zar).¹⁶ This person was the founder-chairman of the Htoo Group, a conglomerate involved in the construction, transportation and logging sectors in Myanmar.¹⁷ He was reportedly a close associate of Senior General Than Shwe, who headed the military government from 1992 to 2011. According to a 2003 report,

Htoo builds roads in the logging concessions and charges the subcontractors 100 000 kyat (US\$161) each day to use them. The subcontractors receive a fixed price from Htoo for logs: 15 000 kyat (US\$24) for a ton of teak and 12 000 kyat (US\$19) for a ton of pyinkado; this does not reflect the true value of the timber ... They are also responsible for transporting the logs, sometimes 30 miles from the forest from where the Htoo Company picks them up.¹⁸

The problem of corruption, both of personnel and perhaps even more importantly of data, is at the core of the illicit timber trade in Myanmar. The degree of separation between Htoo and the physical act of logging for example, means that it would be difficult to legally prove beyond all dispute that the company knowingly traded in illegally harvested timber. Compliance with government regulations and accurate reporting of timber quantities harvested can be ascribed to the subcontractors. But this was where the system broke down. With high-level protectors in government or linked to government officials, subcontractors did not need to worry about being called out if they cooked the books. The state-run MTE, for its part, has used the services of up to 100 subcontractors for harvesting and transportation operations.¹⁹ One expert with knowledge of the illicit logging industry asserts that on-site subterfuge could take a very basic form: MTE's subcontractors might under-report the dimensions of some of the trees that they cut down and avoid assigning serial numbers to some logs.²⁰ Thus, the quantity of timber officially declared as having been harvested by MTE would nominally match the quota imposed by the national Forest Department, even if the actual quantity greatly exceeded this.

Both MTE and the Forest Department fall under the Ministry of Natural Resources, Environment and Conservation, but a strong disparity in their influence means that the Forest Department struggles to keep track of deforestation rates. In theory, the department is responsible for 30% of the country's land area.²¹ But in practice, it has a weaker institutional standing than MTE. It cannot, for example, provide definitive statistics about how much of the land under its control is actually forested. For its part, MTE has been considered suspect by both the US and EU, due to the fact that much of the timber that it supplies to Western markets is thought to come from illegal sources. Thus, the two government entities are potentially working at cross-purposes, with one trying to conserve forestry resources while the other is focused on exploiting them for commercial objectives.



FIGURE 2 Historical and political-economic factors that have impacted the logging industry in Myanmar.

DRIVERS OF THE ILLICIT TIMBER TRADE

Hongmu furniture, made from hardwood species such as Myanmar rosewood, is a status symbol and coveted in China. © *Maocheng*|*Dreamstime.com*

here are two main drivers of the trade in illicit timber from Myanmar. On the demand side, there is the enormous Chinese market which lies immediately adjacent. On the supply side, growing socio-economic desperation is forcing more Myanmar citizens into trading in any kind of high-value commodity. Timber is favoured because, unlike drugs or arms, barriers to entry are relatively low and environmental crime is not a law-enforcement priority. Besides need, there is also greed: elements of the Myanmar state machinery seek to profit from the illicit timber trade through accepting bribes for not interfering with logging operations. Although poverty is not the driver of their activities, it could be argued that they still perceive themselves to be deprived of opportunities to make money legitimately due to the low level of economic development nation-wide.

China's demand for illicit timber

Approximately 80% of Myanmar timber is thought to be smuggled to India and China. Between 2011 and 2015, the two countries together imported six times as much rosewood and teak from Myanmar as the rest of the globe.²² It is likely that China accounted for the greater share of demand, due to its closer business ties and better transport network with Myanmar. There is also a cultural factor: wealthy Chinese have long coveted *hongmu* furniture, a status symbol whose association with royalty dates back four centuries to the late Ming dynasty. In today's China, such furniture is seen as a financial asset, given the fast-dwindling global supply of the rosewood that is used to manufacture *hongmu*.

The rosewood used by the Chinese furniture industry comes from 33 subspecies whose prices range from US\$1 500 per cubic metre for African rosewood to as much as 100 times that amount for its Indian counterpart.²³ Prices are determined not by the distance the shipments have to travel, but by how strongly a particular subspecies of rosewood is associated with traditional *hongmu* craftsmanship. Subspecies that are native to Asia command a higher price than African variants, since Chinese artisans have been working with these rosewoods for centuries. Even so, just a decade of harvesting rosewood in West Africa has had devastating results for local communities. An estimated six million trees were illegally cut down in Ghana and transported to China during 2012–2019.²⁴ The resulting deforestation contributed to



The illegal trans-border timber trade between Kachin state and China's Yunnan province is estimated to be worth US\$600 million a year. Shown here is a view of Pianma, China, where wood is the main business commodity. © Roland Neveu/LightRocket via GettyImages

desertification, possibly aggravating distress migrations to Europe.

The Chinese middle class is projected to reach 550 million people by 2022, which portends that wood consumption will continue to rise in tandem with its buying power.²⁵ Since 1998, seeking to protect China's own forests from this surging demand, as well as to reduce the risk of flash-flooding caused by deforestation, Beijing has banned domestic logging and progressively tightened enforcement of its forestry laws.²⁶ This in turn has caused the demand for imported timber to surge, driving illegal smuggling.

Between Myanmar's Kachin state and China's adjoining Yunnan province, the illegal timber trade is estimated to be worth US\$600 million annually.²⁷ Around 80% of tropical timber imported into China comes from 10 African and Asian countries with weak governance indicators, raising the question of whether their log exports are legal.²⁸ From Beijing's perspective, as long as traders respect Chinese law and import taxes are paid, there need be no questions asked.²⁹ Some critics have argued that China is exporting environmental damage to poorer countries in order to sustain its own economy, having become one of the world's leading furniture producers. Besides wood for luxury products and construction projects, charcoal production is another component of Myanmar's deforestation problem. Villagers who have been driven off their land and are unable to enter the market for smuggling high-value timber resort to burning wood to create charcoal, which they sell to smugglers who transport the fuel to Yunnan. Bribes are paid to military personnel to allow the cargo through to rebel-controlled territory and from there on to China.

Demand for charcoal has boomed in China since 2014, when efforts to boost Yunnan's economy led to the province becoming a leading producer of silicon metal and ferrosilicon, two commodities that are invaluable for modern industry. Silicon metal is used in solar panels, silicon chips and aluminium alloys, while ferrosilicon is used to produce stainless steel. Dehong prefecture in Yunnan, which borders Myanmar, has a number of silicon smelters. In 2016, these smelters consumed over 216 000 tonnes of charcoal in just a single year. The production of this quantity of charcoal would have involved burning the equivalent of 14 000 football fields of forested land. It is believed that the vast majority of Dehong's smelters are fired by charcoal smuggled from Myanmar.³⁰

The European Union as a market for illicit timber

China and India are the two biggest markets for Myanmar timber, but the EU is a crucial player, too. Myanmar has around half of the world's reserves of natural teak, which is prized as a construction material by luxury-yacht manufacturers. Unlike plantation-grown teak, natural teak is rich in oils which make it water-resistant, and silica which makes it slip-resistant even when polished.³¹ It is thus ideal for garden furniture and, more importantly, for boat decks, which require wood that is strong, does not shrink much and is also easy to work with. The EU tightened timber regulations in 2013, which was an important development for the wood industry. Since then, however, western European companies have reportedly been importing Myanmar teak through eastern European transit points where the regulations are less strictly enforced.³² Slovenia, Croatia and the Czech Republic have been mentioned as entry points for processed-teak shipments that are then forwarded to boatyards in places like Germany and the Netherlands. The word 'processed' is important because it indicates that the wood has been through a sawmill in Myanmar where it has probably been mixed with legally harvested timber.³³

In at least one case where illegally harvested teak was used in yacht construction, the wood was sourced from Myanmar's state-run company, MTE. Since it ended up in a German boatyard via a Spanish supplier, investigators struggled to determine at what point its origin was falsified and whether the end user was completely unaware.³⁴ Under EU law, only the original importer is obliged to verify the source of timber and determine its legality. Companies that subsequently purchase the timber are exempt from this requirement.³⁵ Thus, even if end users were aware of the dubious origins of their timber, they could plausibly claim ignorance since they were not required to perform due diligence. According to a German media report, in March 2017 'MTE released a statement saying it would take steps to address illegal logging and its associated trade'.³⁶

Besides the east-west divide in Europe over enforcing the 2013 EU timber relations, there also seems to be a north-south divide. Spain and Italy have been identified as two countries that do not apply the same standards to define illegal timber as do the Netherlands, Belgium, Germany, the UK and Denmark. It is quite possible that timber that is illegally harvested is being laundered in the European wood market by being purchased and resold through companies in eastern and southern Europe.

Myanmar teak is sourced by luxury-yacht manufacturers. © Paul Vinten/Shutterstock





Wood sales provide a key livelihood for many Myanmar communities, including farmers. © Jonas Gratzer/LightRocket via Getty Images

Socio-economic desperation

The supply-side driver of illicit logging in Myanmar is the need of communities for daily sustenance. A self-perpetuating cycle has been created in which intense logging activity in an area drives down the water table, which makes agriculture less viable. Farmers then find it more rewarding to go into the logging sector, which pays a minimum of US\$6 daily, compared to the US\$3–5 that can be earned by traditional activities such as planting paddy.³⁷

At a more basic level is the need for household fuel: most meals in the country are cooked on wood-burning stoves. Only 26% of the population has access to electricity and natural gas is expensive.³⁸ The government can only supply 1 million tonnes of fuelwood to an estimated annual demand of 18 million tonnes. The rest comes from illicit logging carried out at household level. On average, a Myanmar villager spends 233 hours annually collecting fuelwood.³⁹ Considering that 70% of the population can be categorized as 'rural', this amounts to a lot of deforestation. Organized crime plays little role here, although entrepreneurially minded individuals in some communities have made a business of selling fuelwood to homes. Thus, this illicit logging is primarily considered a 'local environmental crime' and only the illegal transport (smuggling) of timber

to foreign countries is considered as 'transnational organized crime'. This seemingly trivial detail offers a clue about why the illicit timber trade has persisted for so long: the scale of poverty in Myanmar means that logging, whatever its legal status, is an accepted instrument of household economic survival.

This is also a point of convergence for the two drivers of illicit logging in Myanmar. Once an impoverished farmer crosses the line from collecting household fuelwood to working with contractors and criminal entities, the rewards can be substantial. Local interviewees confirm that, unsurprisingly, money is at the heart of the illicit trade in timber. Weak governance and government institutions and challenges for enforcement mean that Myanmar's timber industry provides ample opportunity for unscrupulous actors to profit from the country's rich timber resources. Rather than the profits benefitting the local economy or any form of duty or tax going into state coffers, much of the money finds its way into the back pockets of officials through systemic bribery. The Myanmar government's attempts to regulate the trade have failed to curb the opportunities for profiteering outside of the formal system, allowing the illegal trade to continue.



Parts of the Yunnan-Myanmar border regions rely almost entirely on the logging economy. © Roland Neveu/LightRocket via Getty Images

When the two-way trade between Myanmar and China travels on land routes across the eastern Myanmar border region and then through south-western China. The border is marked by official and unofficial crossings, used for both legal and illicit trade. These routes are well-known for the smuggling of illicit goods including wildlife, narcotics and timber. The eastern Myanmar borderlands are mountainous and remote. On the Myanmar side lie Kachin and Shan states. The Myanmar army and various ethnic organizations exercise effective control over different parts of the region. There are also sites of contestation and conflict. On the Chinese side is the vast province of Yunnan. One of the interviewees explained, in reference to transporting illicitly logged timber to China: 'They will not use the main gate ... they will go through other gates, because the border is quite open and they might be able to negotiate with whoever controls the gate.⁴⁰

The Sagaing region, an administrative division of Myanmar that faces India, is reported to be the origin of much of the timber that is illegally harvested. The region accounts for two-thirds of Myanmar's forests and has one of the largest concentrations of forest cover in South East Asia.⁴¹ Most of the timber harvested is high-quality teak of a standard that would grace the yachts of billionaires.⁴² According to a GI-TOC interviewee, the illegal logging industry has adjusted to the depletion of timber reserves near the Sino–Myanmar border, and so has moved its activities to Sagaing, as well as the Magwe region which lies immediately to the south. The interviewee went on to explain that there were large-scale stock-piles of illegal logs near Thabbeikkyin in Mandalay region, but that the main logging operations 'had to look further to the west, as there was less harvesting and less enforcement on the ground'.⁴³

This conclusion is further supported by analysts based in northern and eastern Myanmar. The GI-TOC interviewee in Shan state reported that whatever teak was left near the border was too difficult to extract, in terms of transport connectivity, so the loggers had moved to Sagaing region.⁴⁴ The latter is traversed by two rivers, the Chindwin and the Irrawaddy, both of which run in a generally north–south direction, eventually converging in Myanmar's economic heartland just south-east of Mandalay. These rivers serve as transportation platforms for logging, with the areas around Mawlaik (on the Chindwin) and Katha (on the Irrawaddy) being mentioned as hubs where timber is illegally harvested. Kachin state, once the site of considerable logging, is now mainly a transit point on the smuggling route to China.⁴⁵



A member of the Kachin Independence Army, an ethno-nationalist insurgent group. Kachins have allegedly been involved in illicit cross-border timber trade with China. © *Patrick Bodenham/AFP/Getty Images*

A displacement effect from China's Yunnan province

The proximity, length and porosity of the Sino-Myanmar border have facilitated a long history of illicit timber flows. Smuggling routes extending west to Sagaing region have ensured that the illegal supply of Myanmar timber has continued to flow to Chinese and international markets. The province of Yunnan becomes important here. Yunnan shares borders with Myanmar's northern Kachin and Shan states. In 2006, as areas along the border showed signs of rapid deforestation, Yunnan authorities conducted a shortlived crackdown on the timber trade. Previously, these same authorities had exacerbated Myanmar's deforestation problem by introducing logging restrictions in Yunnan in 1996, two years before Beijing followed suit at the national level.⁴⁶ The restrictions pushed Yunnan-based timber traders to shift their supply lines to Kachin state.

Across the border, a ceasefire was in effect between the Myanmar government and the Kachin Independence Army (KIA), an ethno-nationalist insurgent group. The KIA controlled areas adjacent to the border and trafficking was a risky activity when its cadres were fighting Myanmar soldiers. The ceasefire, which was in place from 1994 to 2011, made illicit transactions easier. According to Bertil Lintner, one of the world's foremost experts on illicit markets in South East Asia, the Kachins were pressured to reach an agreement with the Myanmar military because Chinese businesses based in Yunnan were keen to extract timber and jade from Myanmar.⁴⁷

Taking advantage of the quiet, Yunnan-based entrepreneurs built roads leading up to the border and also beyond into KIA-controlled territory to facilitate the extraction of timber and jade (the latter is mined in Kachin state). Permission to extract these commodities was obtained from KIA commanders who obliged because of China's history of covertly supporting them as a way to exercise leverage over the Myanmar government and lock it into a subordinate role.⁴⁸

The 2006 crackdown by the Yunnan authorities was apparently imposed under pressure from Beijing, which wanted to show that it respected the Myanmar military's efforts to gain control of the timber trade. Taking advantage of the post-1994 ceasefire, the military had expanded its reach closer to the international border, thus encroaching on Kachin territory. In order to limit the insurgents' finances, the military focused on criminalizing routes and waypoints that it did not physically control. These included the numerous cross-border roads that Yunnan-based entrepreneurs had built in the mid- and late-1990s. The fact that the Yunnan provincial government was willing to assist these efforts, even if only for a short period, may have been due to Beijing's keenness to strengthen its relations with the Myanmar military regime.⁴⁹

Once the crackdown was imposed, things became more complicated. Yunnan introduced a requirement that timber imported from Myanmar had to be certified as legal for trade. That same year, the Myanmar government ruled that all timber exports needed to be routed via the seaport of Yangon and that it was illegal to move logs across land borders. By definition, then, any logs that directly crossed into Chinese territory from Kachin or Shan states were illegal. Yet the Yunnan authorities turned a blind eye to cross-border timber imports even after 2006, in violation of their own (and Myanmar's) laws. What made them do so was the 2008 economic crisis.

To protect itself from the global slowdown, China embarked on a spending spree after 2008. The housing sector especially benefited from a stimulus package.⁵⁰ To supply new homes with furniture, Chinese manufacturers needed raw materials from Myanmar. No matter what good intentions may have existed on the part of the Yunnan authorities in 2006, two years later, the exigencies of economics took over. As long as traders from Myanmar could produce a piece of paper stating that whatever timber they were bringing into China was legal, officials in Yunnan probed no further. There were allegations that Chinese businesspeople even crossed the border offering gold bars for the right to log entire mountainsides.⁵¹ Thus, a massive increase in timber trafficking was observed in the early 2010s.

Known smuggling routes

The Sagaing region is a three-way launch point for logs to enter the legitimate wood industry: west, south and east. To the west lies India. Being adjacent to two Indian provinces, Manipur and Nagaland, Sagaing-based groups can supply the Indian market via unmarked border roads. The border is extremely porous due to rugged terrain and is frequently crossed by rebels who are fighting the Indian government but have safe havens in remote parts of Sagaing. In this high-risk environment, it is relatively easy for smugglers to operate under the radar and take advantage of both countries' preoccupation with fighting political militancy.

To the south of Sagaing are the Mandalay and Yangon regions, which contain Myanmar's economic centres. The domestic furniture industry here is heavily supplied by teak smuggled down the Irrawaddy on boats. The wood may be concealed in secret compartments inside the hulls of riverboats or under sacks of concrete or



smuggled under the layers of bamboo that make up the large rafts that ferry cargo down the river. Due to the high price of wood with a certified origin, furniture manufacturers opt to purchase illicitly harvested teak. Local police, allegedly, will not bother to investigate the source of this teak too closely in return for bribes.⁵²

The other direction of illicit timber flow, and quite likely the biggest, is eastwards and on to China. A long-time observer of these dynamics in Kachin state explained how the government seizes large quantities of logs in Mandalay and Yangon but 'conveniently, they do not find the owners'. These are logs are then considered 'ownerless', meaning that no one is charged for illegal logging. In his assessment, the 'illegal timber trade will stay regardless of the policies and measures put in place and the main reason is [...] the [Myanmar] military will reward local commanders by giving personal benefits or interests through this trade'.⁵³ Multiple sources also indicated that smugglers concealed timber in oil tankers, charity vehicles and ambulances to pass through checkpoints.⁵⁴

The two main routes for timber travelling from Myanmar to China can be called the 'upper axis' and the 'lower axis'. Both originate from the Sagaing region.

Myanmar's domestic furniture industry is supplied by teak smuggled down the Irrawaddy on boats. © Ye Aung Thu/AFP via Getty Images



FIGURE 3 Administrative divisions of Myanmar and routes of timber flows.

The upper axis

For the upper axis, timber is sent upriver to Shwegu, a small town on the Irrawaddy in Kachin state, or even further to Bhamo, a long-established centre of the logging industry.⁵⁵ From these places, it is transported by road across territory held by Kachin insurgents before reaching the Chinese border. This route is the older of the two. It has been sustained by funding from across the border. Specifically, the county-level city of Tengchong, which lies in Baoshan prefecture of Yunnan province, has long been identified as a base for timber traders. Areas of Myanmar that face Tengchong county have been so intensively logged that timber harvesting has had to move much deeper into government-controlled territory in Myanmar. Anecdotal information suggests that the wood smuggled along this axis is of lower quality than that on the lower axis.

The Nujiang valley, which lies north of Tengchong, is another hotspot of timber smuggling. Roads have been constructed right up to the Myanmar border in Kachin state. A visiting scholar reported that Chinese loggers are issued official passes by Chinese border guards before being allowed to enter Myanmar.⁵⁶ The area is well north of insurgent-controlled territory, but its very remoteness means that it is not effectively controlled by the Myanmar military, thus allowing cross-border smuggling to occur.

An important border-crossing point along the upper axis is the Chinese town of Nongdao, which lies southeast of Bhamo. Access routes to the town were fiercely contested in 2014 by the Myanmar military and insurgents, due to the lucrative smuggling economy of the area and its critical role in resupplying Kachin rebel forces. Nongdao is close to Ruili, a major Chinese trading centre that is located adjacent to the border and faces the Myanmar town of Muse. The Ruili–Muse dyad is a well-known channel for flows of contraband out of Myanmar. Timber smuggled into China is thought to be stockpiled in Nongdao before being sold on to dealers further inside Yunnan.

There is another border-crossing point in Kachin state that is part of the upper axis. This is the town of Laiza, located northeast of Bhamo. It is the headquarters of the Kachin Independence Organization, the political branch of the KIA. Lying outside of government-controlled territory, the town is served by Chinese utility companies, not Myanmar. Timber reaching Laiza comes from logging sites across Kachin state by way of an apparent logistics hub at Myitkyina, the state capital, which is connected by road to Laiza. News reports suggest that a high number of log seizures occur in the vicinity of Myitkyina. Since 2002, the KIA is believed to have banned logging in territories that it controls. Instead, it imposes 'taxes' on flows that pass through to China. The rate is reportedly US\$1.60 per metric tonne of teak and twice that amount per metric tonne of rosewood.⁵⁷

The Indawgyi conservation area in central Kachin state has also been identified as a hotspot for logging. Besides cutting down trees for fuelwood (as connecting to the electricity grid is prohibitively expensive), villagers also harvest timber for smuggling syndicates. The retreat of the KIA from the area has provided an opportunity for smugglers to operate more openly than in the past.⁵⁸



The Ruili-Muse border crossing between Myanmar and China is a gateway along one of the main timber smuggling routes. © Kyodo News via Getty Images

The lower axis

The 'lower axis' bypasses Kachin state altogether. It involves timber being sent downriver from Sagaing region to Mandalay region, from where it is transported overland in the back seats of cars and vans to the town of Lashio in Shan state and then on to the Muse-Ruili border crossing. This route seems to have become more widely used in recent years. The 450-kilometre highway between Muse and Mandalay has daily traffic of 1 500 trucks, which carry anywhere between 15 000 and 20 000 tonnes of cargo, about 80% of all trade between Myanmar and China.⁵⁹ There are three permanent checkpoints on the highway and a number of mobile checkpoints, which are intended to catch timber traffickers by surprise. According to one former trafficker, the obstacles posed by these checkpoints are simply avoided through bribe payments and advance scouting. The trafficker asserted that, when a consignment of timber was being moved, he and his former confederates would operate in groups of 10 vehicles.⁶⁰ This makes the bribe-taking too lucrative for the authorities to stop the consignment.

A GI-TOC interviewee has claimed that the lower axis, which runs through Shan state, is more extensively

used than the upper axis partly because insurgents in Shan have strong ethnic ties with Yunnan. This makes it easier for them to leverage business and personal contacts across the border in China and find outlets for illegally logged and trafficked timber. The same source also commented that a third route for timber trafficking exists, going through Kayah state to Thailand.⁶¹

The town of Katha in Sagaing region is mentioned as a common departure point for illegally harvested wood sent down the Irrawaddy towards Mandalay or upriver towards Bhamo. This seems to be the area where both the upper and lower China-bound axes originate. The surrounding forests are still thought to be sites of logging, which would now be illegal since the Myanmar government banned logging in natural forests (i.e. outside of plantations) in 2016. There are plans to connect Katha with Bhamo by railway, which, considering that the latter lies a mere 65 kilometres from the Chinese border, would almost certainly speed up the process of timber smuggling.⁶² River journeys between the two places currently take a day. However, the project has reportedly been shelved since 2017 due to attacks by armed rebels along the projected rail route.

INEFFECTIVE REGULATION

A forest denuded by logging. Myanmar cannot afford to do without the logging industry but lacks the means to regulate it effectively. © *Jerry Redfern/LightRocket via Getty Images*

t was estimated in 2020 that Myanmar loses approximately US\$10 billion annually because of illicit logging (counting revenue losses caused by unrecorded trade with all of the country's neighbours, as well as the wider international market, conducted via third countries).⁶³ However, the state has attempted to regulate timber exports, most notably in 2006, 2014 and 2016. In 2006, the Myanmar government mandated that all timber exports would leave the country through the seaport at Yangon. Ostensibly, this was to ensure payment of customs duty. Yet, seven years later in 2013, around 94% of all timber exported to China went into Yunnan by land.⁶⁴ It is believed that 72% of all logs exported from Myanmar during the period 2000–2013 had been illegally harvested.⁶⁵

In 2014, the government banned the export of unprocessed timber. Up to then, logging companies had been cutting down trees far in excess of their state-allocated quota, mixing the extra (i.e. illicit) timber in with legally harvested logs and exporting both to China. By requiring that logs sent out of the country would first be processed in sawmills located within Myanmar territory, the state hoped to increase its scrutiny of the logging industry. Another motive was to add value to timber exports, thereby earning more revenue for state coffers. The new rule is thought to have reduced smuggling from the 2013 levels. But the awarding of concessions to politically connected businesses led to job and property losses among the rural population, which in turn caused an increase in artisanal logging. In 2015 alone, around 118 000 chainsaws were thought to have been imported into Myanmar to meet the demand of villagers who had moved into the illicit wood business. And harvested wood still made its way to China and India, using the same overland routes that had always been favoured by smugglers.

Finally, in 2016, two developments further affected the legal status of timber harvesting. First, the government introduced regulations about who could import, buy or operate a chainsaw. These new rules were intended to slow the process of deforestation but actually had little effect, since most loggers simply ignored them. Chainsaws were available for rent in many communities for the equivalent of US\$100, a fairly large sum of money in rural Myanmar but still a sound investment, given the probable returns.⁶⁶ Since a chainsaw can cut through a tree four times faster than a normal handsaw, buying or renting one allowed a family to earn more income for less physical labour.⁶⁷ Although organized gangs existed alongside the artisanal loggers, it seems that the widespread increase in chainsaws changed the nature of logging in Myanmar, making it much more pervasive (and thus, perhaps, more 'legitimate').

The second development in 2016 was that the new government of Myanmar, led by Aung San Suu Kyi's National League for Democracy (NLD), imposed a one-year moratorium on logging. It was expected that all demand, domestic and foreign, would be met by stockpiles of MTE, the state-owned logging company. After a year, the moratorium was partially lifted and logging resumed on plantations but not in forests. Harvesting timber remains forbidden in the Bago Yoma mountain range, where a ten-year ban is in place (although also ignored by loggers).

These rule changes have demonstrated two important and uncomfortable truths: Myanmar cannot afford to do without the logging industry but lacks the institutional means to effectively regulate it. This is understandable to some degree, as the military's focus has long been the preservation of territorial integrity against ethno-nationalist separatist movements.

There are approximately 6 050 armed militias across the country, whose job is to assist the military in battling ethnic insurgents.⁶⁸ The militias, typically consisting of 20 to 30 men, provide security for public infrastructure and deny rebels free movement across the countryside. Although they are meant to be financially supported by the military, in practice this merely involves turning a blind eye to racketeering by militiamen. It is believed that some militias are involved in the timber trade. There are also BGFs that operate as subsidiaries of the military. They also engage in the illicit economy, including the timber trade, and reportedly pass on a percentage to local military commanders. An example is the New Democratic Army-Kachin (NDAK), a former insurgent group that turned into a BGF and which through its control over access routes to China's Yunnan province, plays a significant role in 'taxing' commodity flows.69

Companies also deliberately misuse the concessions granted to them to pursue commercial projects. Tanintharyi region, in the far south of Myanmar, is relevant here. A high number of log seizures in Kayah state, which lies just south of Shan state (where Lashio and Muse are located), might indicate that timber is being moved up from Tanintharyi. The region's lowlands are being carved into palm tree concessions that, according to the approximately 50 companies that have obtained them, are primarily meant to produce palm oil. However, an academic study found that only 15% of palm concessions in southern Myanmar were being used for their original purpose.⁷⁰

For the remainder, it seems that the concessionholders' real intention is to submit a false business proposal in order to obtain government permission to clear forested areas. Timber felled during the clearance process can be deemed 'conversion timber' – an environmental version of 'collateral damage' – which is not seen as deliberately harvested for business purposes and can be sold openly on the market. Another ruse used by companies is to request a concession for a rubber plantation. All told, around 18% of the land granted for palm or rubber trees in Tanintharyi region has been planted as was originally proposed.

At the other end of the country, Kachin state has been the location of a large number of agribusiness concessions, especially banana plantations, which environmentalists have labelled as one of the main drivers of deforestation in Myanmar. Tanintharyi and Kachin together have 60% of all concessions that have been granted in the country.⁷¹ In Kachin, the level of abuse is higher: only 12% of the land granted for commercial farming has been planted. With the declining power of the KIA to extort 'taxes' from logging companies – except in the narrow strip of territory along the border which it still controls – deforestation rates have risen in recent years.

ACTORS IN THE ILLEGAL TIMBER TRADE

Insurgent groups, such as ethnic armed organizations, used to control key logging areas and transport routes to China. © *STR/AFP* via *Getty Images*

here are four key groups of actors relevant to the illegal timber trade from Myanmar to China. These are: the Myanmar government; businesspeople based in Myanmar; local armed actors, such as ethnic armed organizations and militias; and actors based in China. The term 'Myanmar government' here includes both elected civilian governments and military regimes. Following the 1 February 2021 coup in the country, some analysts argue that a military regime should be regarded as separate from the institution of government. However, this report treats the military as part of government, if for no other reason than its clear preponderance in the country's political affairs and its control over the state apparatus. This position does not equate to endorsing the military's actions, or to criticizing them either. Another point that needs to be clarified is that artisanal loggers are subsumed within the framework of Myanmar businesspersons. This is because they either directly harvest timber, if they have the required permission to do so or, more often, purchase timber from subcontracted locals.

Our in-depth interviews and literature review all point to the same set of actors driving the illicit timber trade. They are also implicated in other illicit trades across the Sino–Myanmar frontier, including the wildlife trade, drug trafficking and borderlands casino businesses. For its part, INTERPOL contends that 'money laundering, corruption, drug trafficking and other types of organized crime are proven to be linked with illegal logging operations in this region [South East Asia]'.⁷²

A senior Myanmar government official also indicated that there is a 'grey zone in terms of what is legal or illegal' in the logging industry. In his experience in the border areas, 'the way it is, everyone is happy with it and the small-scale illegal movement is accepted'. The official also recognized that the government 'cannot eradicate everything [because there are] too many actors, many environments', referring to the mountains, valleys and remote locations.⁷³ He indicated that 'there is a whole network with what you could say is big collusion: police, ethnic groups, GAD [General Administration Department], Forestry [Department], military [...] and there is a chain, so that even the military tries to avoid timing their patrols to run into loggers'.⁷⁴ The Myanmar government official confirmed that Chinese criminal networks are active throughout the Sino–Myanmar border region with a significant presence in the narcotics business as well as involvement in gambling, timber and wildlife trade.⁷⁵

The following sections analyze the four key groups and their involvement in the illegal timber trade from Myanmar to China.

Myanmar government

Between 1988 and 2011, Myanmar was the site of large-scale illicit logging as the ruling military junta, subject to international sanctions, sought to monetize forest resources. Teak exports had already been the country's second-largest foreign-exchange earner for several decades. Then, from 2011, as the junta moved to introduce popular governance through the reintegration of the NLD and its leader Aung San Suu Kyi, logging increased significantly. Between 2010 and 2015, Myanmar had the third-highest rate of logging in the world, after Brazil and Indonesia, losing 1.3 million acres of forest cover annually.⁷⁶

The country is thought to have lost 15 million hectares of forest after 1990, with the twenty years between 1990 and 2010 accounting for an annual decrease in total forest cover of almost 1%.⁷⁷ During 2010–2015, this rate doubled to nearly 2%. And from 2016 onwards, with the election of the NLD and a political shift to civilian rule, the rate of deforestation accelerated even more. Ceasefires negotiated between the government and many of the 17 major ethnic rebel groups spread across Myanmar allowed logging to gain momentum. The most influential rebel organizations tended to be concentrated along the border with China, the world's biggest importer of timber.



During the 1988–2015 period, timber companies were given logging permits that were not strictly enforced. The government apparently saw little reason to protect natural resources it could monetize for muchneeded foreign exchange.

Following the NLD's entry to political power in 2016, logging was initially banned, but this measure proved to be temporary as the civilian politicians realized that they, too, needed cash flows into the economy, and timber was one of the few ways to generate them. Thus, the permit system was resurrected and enforcement faded as a policy priority.⁷⁸

According to a Yangon-based analyst, a key issue is the manipulation of the government-granted quota or 'annual allowable cut' defined by MTE. In the early years of the NLD government, there were frequent reports of illegal logging seizures and there was increased conflict between loggers and forest wardens. But as the party's focus shifted towards governing the country, it found itself unable to maintain the momentum of the crackdown.⁷⁹ In this context, and with the additional complexity of the February 2021 coup, it appears unlikely that the Myanmar military authorities will try to put an end to illegal logging, and the supply of illicit timber to China and the global market.⁸⁰

Recent enforcement activities by the Chinese government (as discussed later in the report) may contribute to the desired effect of reducing demand for illegally harvested and sourced timber. Overall, though, it seems that political uncertainty and renewed conflict in Myanmar will be conducive to criminality. Reports from the field indicate Myanmar's borderlands have opened even further to business and cash from China, to the extent that the Chinese government is now pressuring criminal fugitives in Myanmar to return to Chinese jurisdiction by cutting off welfare payments to their relatives.⁸¹ There are also reports of new militias (not BGFs) forming in Kayin state in the south.⁸²

Following the coup that ousted the former head of state, Aung San Suu Kyi, there was a reported increase in illicit cross-border trade with China. © Koen Van Weel/ANP/AFP via Getty Images
Myanmar businesses

Our interviewees indicated that a large number of Myanmar businesses across the borderlands are involved in illegal logging and trading of illegally sourced timber. Businesses operating in the illegal-timber trade rely on close connections to the state-owned MTE, as well as military and armed groups to enable their participation. A fairly unsophisticated practice of mislabelling and underquoting volumes and types of logged timber opens the timber industry to illegal profiteering.

According to a senior businessperson who has worked for many years in Yangon, 'to succeed in the timber business you need to have connections, but you don't have to be somebody's son'.⁸³ From this perspective, 'illegal timber is pretty attractive because you just need to find a buyer, but drugs and everything else need more investment, people and planning.'⁸⁴ In his judgement, it is 'a much less dangerous game than guns or drugs'.⁸⁵ But he went on to clarify that knowing the local heads of various militias and insurgent groups that operate along the timber traffickers' route is essential, so that a financial understanding can be reached with them.

Due to entrenched crony capitalism, a study of the private sector in Myanmar necessitates an understanding of patron-client networks extending from within the government to (successful) entrepreneurship. In the timber trade, linkages between trafficking and state corruption are not limited to conflict zones. It has been alleged that the transportation of illegally harvested timber in Mandalay region is enabled by bribes paid to police officers at highway checkpoints.⁸⁶ At a higher level, senior government officials receive 'gifts' in the form of payments for their children's foreign education, expensive holidays and hospital bills, as well as the outright bribery of top army generals. All of these tactics have been ascribed to logging tycoons such as the late Cheng Pui Chee.87

Even more ominous are hints of classical kleptocracy. State-owned enterprises in Myanmar are permitted to retain 55% of their profits in what is known as 'other accounts' (OAs). MTE allegedly



Under the government of General Thein Sein (second from left), it has been suggested that deforestation increased. © Khin Maung Win/AFP via Getty Images

retained US\$233 million more than it was eligible to in its own OA. Furthermore, all the money (up to US\$1.4 billion) was later removed, with no identification of the beneficiaries. In 2019, the NLD government required that all state-owned enterprises shut down their OAs, and that all profits should be declared and recorded.⁸⁸ With the 2021 coup, it is extremely unlikely that any such measures towards transparency will be sustained.

One assessment holds that the rate of deforestation rose during 2011–2015 precisely because the transition government of President Thein Sein was eager to oblige the private sector.⁸⁹ Although most media reportage focuses on illicit logging in Sagaing and Tanintharyi regions and Kachin state, it seems that the problem occurs across most parts of Myanmar to varying extents. Illegal logging cannot be described as only a characteristic of ethnically based insurgencies in areas outside state control. Roads and bridges built in officially designated concessions by MTE, which are not destroyed as required by law, are simply used by private contractors when the stateowned company has ceased its operations.



Chinese businesses reportedly have relationships with insurgent groups, such as the United Wa State Army, shown here, to facilitate the timber and other illicit trade across the Sino-Myanmar border. © Ye Aung Thu/AFP via Getty Images

Local armed groups

Insurgent groups such as the KIA and the United Wa State Army (UWSA) used to control key logging areas and transport routes to China. Now, however, virtually all of the forests that the KIA controlled have been exhausted of valuable hardwoods. The KIA currently earns revenue by taxing routes and border gates, with the bulk of its income derived from the jade trade. The UWSA, for its part, earns most of its income from the drug trade. It has been reported that Chinese businesses have close relationships with these groups to facilitate the timber and other illicit trade across the Sino–Myanmar border. Allegedly, some insurgent groups are able to fund their operations through stakes in timber and mining concessions, and also investments in the hospitality sector. The same is thought to apply to some pro-government militias.⁹⁰ The degree to which the KIA and UWSA are presently involved in timber trafficking, either directly or indirectly, has been disputed by knowledgeable experts.⁹¹

An account by a Kachin official highlighted the control that armed ethnic organizations held over key smuggling routes.⁹² He indicated that the best road to China is to Tengchong. The road is controlled by Zahkung Ting Ying, a former NDAK commander who is now in charge of a Myanmar government-backed BGF.⁹³ His personal background illustrates the cross-border ties that bind the timber trade: Ting Ying is an ethnic Chinese, born in Baoshan prefecture of Yunnan province. Yet he is a Myanmar citizen and claims a Kachin identity. He and the NDAK's erstwhile director of finance, another ethnic Chinese called Gao Liang, invested their profits from the timber trade in their respective home communities in Baoshan prefecture.⁹⁴ It is worth noting that, while the Myanmar government blames ethnic rebel groups for not doing enough to stop illicit logging in their strongholds, the limited data available suggests that deforestation rates are higher in government-controlled areas.⁹⁵ Specifically, in areas under government control within insurgency-affected regions.

According to one study of illicit markets in South East Asia, the Myanmar military (known as the Tatmadaw), facing a cash crunch in the late 1990s, took to encouraging field commanders to engage in fundraising rackets to reduce the strain on the federal budget. Given the army's priority of containing separatist movements, many commanders arrived at the unofficial solution of allowing pro-regime militias to engage in criminality and then pass a cut of their profits upwards to the military. Referring specifically to the drug production facilities in Shan state, the study noted:

Symbiotic relations between Tatmadaw units and militias have created what may be described as hierarchies of extraction: militias profit from the drug trade in return for fighting insurgency, ensuring local stability, and providing access to areas under their control. In this way, Tatmadaw battalions benefit indirectly from the drug trade by creating unofficial protection rackets that allow them to profit from their connections with the militias while keeping a layer of distance and subterfuge between themselves and drug profits.⁹⁶

This analysis was further supported by GI-TOC interviews. According to an interviewee in Kachin state, the military turns a blind eye in return for operational assistance from militia groups, such as scouting at the local level and some reinforcement in logistical support. In return, the militia commanders are allowed to engage in whatever businesses they wish. The interviewee highlighted that responsibility for trafficking, whether of drugs or timber, lies not just with militias and insurgent groups, but also with the Tatmadaw's regional commanders.⁹⁷

Chinese actors

Chinese migration to Myanmar and Sino–Myanmar cross-border trade dates back thousands of years.⁹⁸ The trading connection between Yunnan and Myanmar's eastern states significantly predates Yunnan's incorporation into the Chinese empire during the Yuan Dynasty (1277–1367), having first been officially recorded in 128 BCE.⁹⁹ This history is an important background to the current presence of Chinese interests in the borderlands region.

The following section expands on the role of Chinese business interests, the country's economic and political interests in Myanmar and the role of state actors in enabling and countering the illicit timber trade.

Chinese businesses

Chinese companies control the supply chain of timber from Myanmar to China. An analyst from the region noted that, in the past, Thai businessmen and Indian traders were involved in timber trading, but 'now the majority of timber trading in Myanmar is in the hands of the Chinese'.¹⁰⁰ Chinese-owned businesses have strong networks of connections and presence in Kachin and Shan states in Myanmar's border region.

In Kachin state, they are investing in banana plantations and fruit and vegetable farms. The produce from these farms is then allegedly mislabelled as grown in China.¹⁰¹ As described above, such 'agribusinesses' are one of the most important causes of deforestation in Myanmar.

Smuggling of rosewood requires a more exclusive type of supply chain, due to the specific profile of the consumer: *hongmu* manufacturers in China. Connecting sellers to buyers is a delicate matter handled through intermediary business contacts. In 2014, it was estimated that 95% of all redwood imported to China from Myanmar was brought in by around 40 firms clustered in Yunnan province.¹⁰² These firms have timber import licences issued by the Chinese government. Using the licences as legal cover, they subcontract the actual movement of timber to smaller firms that take the risk of bringing it across the border. *Hongmu* is, after all, a luxury good and those producing it have reputations to protect, which is why layers of cut-outs exist between them and those doing the logging. The main centres of *hongmu* processing are not in Yunnan but rather in eastern China, especially the Pearl River delta.

On the Chinese side, corruption is institutionalized. An 'agent system' exists at border crossings, in which companies that are importing timber solicit the services of a customs clearance firm. Representatives of these firms are present at crossing points. When a timber-carrying truck arrives, they confirm that the truck operators are clients of their own firm and submit verifying documents to customs officials. The truck is then allowed to enter China without undergoing inspection. In effect, this system undermines Yunnan's efforts to fight illicit logging, since the documents submitted to customs officials are believed to include forged declarations that the timber is legal on the Myanmar side of the border. On the face of it, however, this cannot be true if the timber is transported overland to China and if it is imported as unprocessed logs, both of which are illegal under Myanmar law. The largest customs clearance firm in Yunnan is the Jinxing Group, which also provides storage yards for timber in the border areas.¹⁰³

A more questionable business entity is the so-called BDYA Group, named after the initials of its four leaders. It provides protection services to smaller businesses that use unmarked roads and informal crossing points to move timber into China. The group is thought to have reached agreements with both KIA and Myanmar army commanders, allegedly to facilitate the smuggling of timber across the border. One of the leaders is based in Ruili, while another might hail from Tengchong, as do many timber traders.¹⁰⁴ Importantly, the 2019 corruption case against Yang Mingjin, a former deputy captain of the Border Defence Brigade in Ruili, revealed the complicity of Chinese government border officials in the trade between 2007–2018.¹⁰⁵

State economic and political interests

It is difficult to disaggregate the significance of China's Belt and Road Initiative (BRI) in the border region from broader narratives of Chinese investment, the presence of Chinese businesses and China-linked enterprises and, indeed,

large-scale infrastructure projects that predate the BRI. Reports that Chinese enterprises in the borderlands have co-opted the government's BRI to strengthen their own appearance of legitimacy further complicate the matter.¹⁰⁶ Considering China's interests and role, one Asia-focussed investor contended that 'the Belt and Road Initiative is only relevant as it gives some logical connection, an ostensible logic, to China's export growth model. It is best seen as marketing, as a wrapper.'¹⁰⁷ In his analysis, 'BRI is multiple players' and relies on these players 'following their own interests'. Furthermore, because 'Yunnan is already peripheral, and is so reliant on land-based commerce', it relies heavily on Myanmar trade.¹⁰⁸

In 2011, local opposition led the Myanmar government (which was headed by Thein Sein, a former general who had assumed the presidency as a civilian) to suspend construction work on a Chinese-funded dam in Kachin state. For years, anger had been mounting among the Kachin population about the loss of farming lands to infrastructure projects that were negotiated between the two governments, but about which they had not been consulted. Another dam project on Kachin territory, which was also opposed, sends 90% of its electricity yield across

The trading connection between China and Myanmar is centuries old. The Chinese influence in the borderlands, and in the region more generally, has been supercharged by Beijing's Belt and Road initiative. © *Taylor Weidman/Bloomberg via Getty Images*



the border to Yunnan. Resentment over this project boiled over into open hostilities between the Myanmar army and the KIA, ending the 17-year ceasefire.¹⁰⁹

As combat operations resumed, Beijing noted a change in Naypyidaw's governing style: the Myanmar military would not suppress popular protests by force. The government was also seeking to reopen relations with Western democracies and reduce its dependence on Chinese patronage. China accordingly began to push for peace talks between the KIA and the army.¹¹⁰ In part, its motive was to take a leadership role in any future negotiations and preclude American or European participation. But the Chinese also seemed to appreciate that continued instability in Kachin-dominated areas would jeopardize Beijing's plans to create an overland energy-and-trade corridor through Myanmar to the Indian Ocean.

The China–Myanmar Economic Corridor (CMEC), a subsidiary project of the BRI, is presently enhancing infrastructure connections between Yunnan and Myanmar, and deforestation rates in Myanmar can only be expected to rise. The 1 700-kilometre corridor will include new railway lines from the border region to Mandalay, and probably further to Yangon in the south and the western seaboard port of Kyaukphyu. China has long pushed for a development project in Kyaukphyu, which would do little for Myanmar's own economy but would allow Chinese energy supplies to bypass any naval blockade at the Straits of Malacca. It would also collaterally allow China's navy – the world's largest – to strengthen deployments in the Indian Ocean. Although Myanmar's Constitution prohibits allowing foreign troops on its soil, there is some ambiguity about whether this extends to logistical facilities for foreign vessels.¹¹¹ Some commentators speculate that, in the event of rising tensions with India or even the US, the Chinese navy could have a string of maintenance depots lodged in supposedly neutral countries from which it could sortie.¹¹²

This speculation is relevant to the illicit timber trade because it suggests that Chinese economic ties with Myanmar are driven by a higher geostrategic purpose beyond mere commercial interest. In addition to railway construction and port development, a major CMEC goal is to develop a Border Economic Cooperation Zone that would effectively tie the Myanmar economy to China's. In any future regional conflict, even if it does not participate in hostilities, Naypyidaw may find itself unable to deny berths to Chinese warships between combat missions.

Beijing also retains leverage over Naypyidaw because the rebel groups along the Yunnan–Myanmar border, such as the KIA, survive with tacit Chinese support. If Myanmar resists CMEC undertakings that are crucial to Beijing's interests, such as overland access to Kyaukphyu, China can strengthen rebel groups along the border. Thus, irrespective of Myanmar's own policy preferences – it is courting India as a counterweight to China, and New Delhi has been responsive – the South East Asian nation seems destined to be an economic hinterland for China's vast markets. It is likely that the environmental fallout of increased connectivity with these markets will include increased extraction of natural commodities such as jade and timber.

Anti-corruption crackdown in Yunnan

Historically, the Chinese government, whether at central or local levels, has done little to block the illicit overland flow of timber from Myanmar into Yunnan province. Despite the more recent Chinese enforcement activities, which revealed extensive involvement of Chinese government officials and businesses, Beijing has had little interest in stopping the illegal timber trade from Myanmar. Rather, it has focused on strengthening its ties with the military regime whenever there was one in power in Nyapyidaw, which was the case for most of Myanmar's history since 1988. Even the 2019 crackdown in the border town of Nongdao was more closely aligned with Chinese President Xi Jinping's anti-corruption drive than any specific intent to hinder the overland timber trade from Myanmar.

As part of Xi's corruption crackdown, the Chinese government's counter-smuggling efforts in Yunnan took a significant turn in 2019, after key officials in the frontier defence brigade (*gongan bianfang*) were arrested in the first half of the year for accepting bribes from smuggling syndicates. The arrests of three cadres in charge of the Dehong, Xishuangbanna and Ruili frontier brigades apparently provided information used to conduct massive armed police raids in July 2019. The raids uncovered a number of illegal warehouses in Nongdao town, Ruili, and identified the bosses behind more than a decade of cross-border timber-smuggling operations.¹¹³ The operation highlighted the extensive involvement of China-side actors in the Sino-Myanmar border illicit timber trade.

The disciplinary and later legal investigation into Yang Mingjin, a Ruili cadre, unravelled years of corruption and complicity in the timber smuggling trade.¹¹⁴ Details of the investigation that were reported in the local media revealed that Yang allegedly assisted smuggling groups from April 2012 to December 2018. One article claims that Yang accepted RMB1.77 million as well as premium quality furniture, jade, tobacco and alcohol during this period.¹¹⁵ This was the first time those responsible for 'frontier defence' had launched an investigation against public officials for smuggling.¹¹⁶ Leaders of the Dehong and Xishuangbanna frontier brigades were also arrested for accepting bribes in June 2019.¹¹⁷

Legal cases such as this, and improvements in Chinese domestic forest policy and regulation, provide some cause for optimism. But while there may be increased attention on the roles of Chinese government officials in smuggling across the border, this is unlikely to dismantle the enabling environment for illegal timber provided by the Chinese government. In China, as in Myanmar, confronting the trade itself is far down the priorities list.

ENFORCEMENT CHALENGES

the Land

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Widespread illicit logging in Myanmar presents multiple, complex enforcement and regulatory challenges. Here, a border police officer stands guard. © *Hla Hla Htay/AFP via Getty Images*

n Myanmar, widespread artisanal logging by impoverished villagers promotes a complacent view that logging is 'only' an environmental crime without considering the larger structures behind it. Thus the government Forestry Department, which bears the responsibility for combating illicit logging, is under-resourced and lacks investigative powers to probe higher up the loggers' chain of command and identify their financiers.

Political conflict presents another obstacle. As long as the risk of violence exists, communities cannot take responsibility for managing their local resources. They are also unable to resist unsustainable logging of valuable hardwoods, for which market demand exists and which can be monetized by outsiders.

One of our interviewees listed the enforcement challenges as follows: difficult terrain in hilly and forested regions with poor road connectivity; presence of rebel armed groups; lack of manpower and funding; and the risk of attack by loggers.¹¹⁸ A local environmental and forest advocate who maps and investigates illegal logging in Kachin state said that he was unable to access key logging areas due to their remoteness and the presence of armed ethnic organisations. The same interviewee indicated that, for every Forest Department employee, there are 20 000 acres of forest for oversight: a near-impossible task without access to high-end technology.¹¹⁹

Officials who are responsible for safeguarding natural forests are not provided with the tools needed to uncover networks of patronage, and the government takes few precautions to protect them. The fact that such activity takes place in isolated spots means that there are no police in the area who could prevent an official from being murdered and the body secretly disposed of, and no witness can later ensure that justice is served in court. Forest officials who attempt to stop illicit logging thus have to approach the police for protection.¹²⁰ They are still better off than journalists, who can be eliminated with few questions asked, as press freedom is a relatively new – and highly tenuous – concept in Myanmar.¹²¹

Both external observers and policymakers in Myanmar commonly assume that preventing illicit logging is the responsibility of the Forest Department alone. But, given the challenges its personnel face on the ground, a joint approach between multiple agencies is needed. This in turn requires that combating logging be elevated to a priority task, and not just within the country but also by Myanmar's neighbours.

Around 99% of those arrested for illicit logging are reported to be Myanmar nationals.¹²² However, this masks the involvement of Chinese citizens who illegally crossing the border to engage in the same activity. In 2015, the government of Myanmar arrested 155 Chinese loggers deep inside Kachin state in a coordinated sweep. Media reports indicated that a total of 1 700 Chinese nationals might have been present in the area where the crackdown took place.¹²³ Most evaded capture and fled back to China, hiking across the border with the help of the KIA. They left behind them 4 500 tonnes of harvested timber and equipment worth a total of 300 million yuan (US\$46.3 million), including 400 trucks. Seeking to obtain the release of the 155 arrested loggers, a group of 23 Chinese firms based in the Tengchong area said that their presence in Myanmar had been legal.¹²⁴ They claimed to have received permission to harvest timber in Kachin state from a former rebel commander who had defected to the Myanmar government.

After sentencing the 155 Chinese nationals to lengthy prison terms, Naypyidaw released them under a general amnesty and deported them. Chinese media reporting at the time depicted the episode as a power struggle between the Myanmar government and local Kachin leaders, with the loggers being mere collateral victims.¹²⁵ However, what came to light in the months following was that many of the loggers were unaware that they had broken any laws in crossing the border. They had been hired for low wages, which were nevertheless much greater than what they could earn back home, and their entry into Myanmar had taken place with the knowledge and approval of Chinese border guards.¹²⁶ They did not know that this approval counted for nothing under Myanmar law.

Information about the presence of Chinese organized-crime groups in Myanmar is extremely sparse, but given the well-entrenched supply chains that run across the border with Yunnan, it is quite possible that such groups are involved in timber supply chains to some degree. Further research on this issue is needed. Journalists have reported an interesting rumour that companies engaged in illicit logging sometimes pay their workers in drugs: specifically, methamphetamines.¹²⁷ It is not clear whether this might be because they are part of a poly-criminal entity engaged in drug smuggling or merely because they have transactional contacts with drug smugglers.



Allegedly, the same set of actors behind the illicit timber trade are also said to be implicated in other illicit activities in the borderlands, including casino businesses. Casinos can operate below the radar and not report transactions. © Christophe Archambault/AFP via Getty Images

ne of the reasons why Myanmar is so dependent upon trade with China is the former state's weak institutional capacity. In 2019, tax revenue as a percentage of GDP stood at a low 5.8%, reflecting the government's challenges in providing basic services.¹²⁸ Thus, monetizing both its own natural resources and its overland proximity to a vast and growing market like China is a rational policy for Myanmar to adopt. A 2015 study noted that illicit capital flows into Myanmar were much greater than outflows. This trend has been observed elsewhere in countries where drug trafficking is a serious problem, such as Mexico, Afghanistan and Thailand.¹²⁹ Illicit logging in Myanmar thus cannot be viewed in isolation from the larger context of high levels of political and/or criminal violence. Such violence obscures the long-term negative effects of logging by seizing the full attention spans of policymakers and security forces. It also deters foreign investment, making the country dependent on a few patrons who seek to exploit it for their own geopolitical interests, whether these be China, the US or India. Crucially, it seems that the biggest driver for illicit financial flows is not macroeconomic instability but rather weak governance, which brings the question of state capacity to the forefront.

Myanmar has a Financial Intelligence Unit that operates under the Home Affairs ministry and lacks autonomy in processing suspicious-transaction reports. The country also has weak legislation to combat terrorism financing and still bears the legacy of decades of socialist isolation from the international economy. Casinos along the border with Thailand, for example, can simply operate below the radar and not report any transactions. For a long time, the strong NGO sector in Myanmar was seen as a vulnerability in terms of tracing cash flows. There was greater scrutiny of this sector when the NLD came to power in 2016, although possibly for reasons that have more to do with stifling anti-government criticism than interdicting illicit flows.

An estimated 85% of the population rely on cash couriers to make payments outside of formal banking systems.¹³⁰ A large amount of cash floats within the informal economy and is used in off-the-books transactions. For example, it is thought that, in 2010 alone, wood exports to China and India were under-invoiced by US\$119 million and US\$40.9 million respectively. Other commodities, such as metals and precious stones exported to China, were under-invoiced by US\$155.4 million.¹³¹ By far the biggest contributor to IFFs was the drug trade, thought to account for annual revenue of US\$2 billion. Anecdotal reports point to the use of illegal money-transfer systems for transactions related to the timber trade, including cross-border transactions (referred to as hyndai in the borderland region, as hawala or hundi in South Asia and the Middle East, and as hui k'uan, ch'iao hui, phoe kuan, among others, in Chinese dialects).¹³² These illegal money-transfer systems rely on strong networks in the originating and destination countries to facilitate the fast transfer of funds and are widely used in other illicit trades, including narcotics, human trafficking, terrorism and gambling.¹³³ Such underground banking systems may also operate in concert with other practices, such as false invoicing and customs declarations.

Crony capitalism makes for a convenient screen behind which illicit flows, of both funds and goods, can be transacted. Due to its unusual history of overlapping socialist and military rule (the former from 1962 to 1988 and the latter from 1962 through to 2016), Myanmar is a strong example of an economy that has been captured by elite interests. A 2018 report by the Financial Action Task Force observed that

Myanmar's economy is marked by both military-owned firms and those owned or controlled by individual military officers and their family members who entered business, particularly from regional commanders, as well as entrepreneurs who dominate key sectors through continuing close relations with leading generals. A small set (approximately 15) favoured individuals were selected as 'national entrepreneurs' and were systematically favoured by state patronage and now own Myanmar's largest conglomerates, with interests spanning banking, real estate, tourism, mining, timber, manufacturing, construction, transport and telecommunications. Many commentators and government sources indicate that these figures were once referred to as cronies dominant in the economy, but are now considered tycoons. While they control as little as 5% of businesses, sources indicate they control a majority of the country's wealth.¹³⁴

That reference to timber is important. It demonstrates that illicit logging is conducted within a broader context where undeclared profits can be laundered by circulating them through legitimate front businesses in apparently unconnected sectors of the economy.

AND BEYOND

Women carry burning torches as they march during a demonstration against the military coup in Yangon on 14 July 2021. © *STR/AFP via Getty Images*

fter five years working alongside the military under the 2008 Constitution, Aung San Suu Kyi's NLD government was overthrown by a military coup on 1 February 2021. At the time of writing, and after weeks of widespread protests in Myanmar, the outcome and enduring impact of the coup is far from certain. In terms of this report, however, it is necessary to briefly explain the context in Myanmar's borderlands and the possible impact of the coup on illicit trade.

For a start, developments in Naypyitaw and Yangon are often peripheral to the Myanmar–China illicit timber trade. Yet, the decision calculus can change for the actors involved in the trade. Persons who were previously unconcerned about the prospect of an NLD defeat are now less than happy that the military has intervened so blatantly in the political process once again.¹³⁵ Likewise, for Chinese businesses in Yunnan, the calculus has changed and possibly there will be greater risk-aversion.¹³⁶ However, it is still likely that illicit trade in the borderlands will do well. Those Chinese firms with strong contacts in informal markets and expertise in negotiating past customs checks will thrive because the political turmoil in Myanmar will reduce the number of officials that need to be bribed.¹³⁷

Proof of this seems to lie in satellite imagery taken since the coup, which shows an apparent increase in the size of deforested areas.¹³⁸ There have also been concerns that the military is selling stockpiled wood that had been seized earlier from traffickers and can now be monetized quickly. Such concerns must be weighed up against claims that 'the military is cracking down on the informal economy across the whole chain'.¹³⁹ An optimistic reading of the situation would be that tighter control by the military would reduce timber trafficking; a pessimistic assessment would be that the army authorities are merely eliminating competitors in the illegal timber sector and consolidating their institutional hold over it. There is now a checkpoint staffed by Forestry Department officials at 0-Mile, just outside Yangon on the highway from Naypyitaw and Mandalay, to check trucks heading towards the Yangon port. The exact purpose of this checkpoint is unclear, but it reportedly fits the pattern in which soldiers demand and accept bribes to facilitate the movement of timber.

The coup has also exacerbated key drivers of the illegal timber trade that were already heightened by the impact of the COVID-19 pandemic, which in 2020 led

to significant job losses across the Myanmar economy. The coup has focussed military surveillance on the nationwide Civil Disobedience Movement, and a number of our interviewees indicated that illegal businesses will flourish under these conditions. It is also possible that the Myanmar military regime will be tempted to deregulate the logging sector, in order to stimulate local employment and save businesses from shutting down.¹⁴⁰ Signs of similar developments have already been observed in Indonesia, where, in the wake of COVID-19 economic disruption, the government made an abortive attempt to reduce the number of checks carried out on harvested timber. Strong opposition led to this move being rescinded, but the effort itself was ominous.¹⁴¹

Another factor is that, in April 2021, the US government sanctioned MTE over its links with the current military regime.¹⁴² MTE has also been sanctioned by the EU, UK and Canada. To avoid potential liability for dealing directly with the company, foreign buyers might prefer to conduct business with private-sector proxies who could serve as cut-outs between MTE and international timber markets. In such a scenario, any deregulation will be largely superficial and primarily intended to evade sanctions.

Retrenchment of military rule and a renewed tilt towards China

The acquisition of land for agribusiness by Chinese companies is likely to play a significant role in providing a 'legitimate' commercial cover for further exploitation of Myanmar's forests. The case of banana plantations in Kachin state is illustrative: as a result of massive Chinese investment in creating these plantations, Myanmar's banana exports increased by 250 times over a seven-year period from 2013 to 2020. Meanwhile, Kachin state has lost almost all of its valuable hardwoods, owing to them have been categorized as 'conversion timber' while forestland is cleared for plantations.¹⁴³ In total, over the last 20 years Myanmar has lost an area of forest cover equivalent to the size of Switzerland.¹⁴⁴ Following the coup, there has been a wave of critical writing against the Tatmadaw, including from foreign scholars. The economy is predicted to contract by more than 20 per cent as a result of the disruption to international trade, as well as international sanctions.¹⁴⁵

An important question remains: can democracy really take root in a country where the military leadership controls most of the wealth produced by natural resources? In the face of international condemnation, the military has decided to raise funds by auctioning illegally harvested timber that was seized under the NLD government. It has also issued fresh permits for logging.¹⁴⁶ The amount of timber offered for auction could be as much as 200 000 tonnes.¹⁴⁷

To hedge against diplomatic isolation, the military regime has appointed politicians with a known pro-China orientation to key cabinet positions, such as the minister for international cooperation, the minister for foreign affairs and the minister for electricity and energy.¹⁴⁸ It can be expected that, should Western countries settle into a repeat of the 1988–2011 policy of ostracizing the Tatmadaw, such individuals will constitute a bridge between Naypyidaw and Beijing to keep the Myanmar economy (and the Tatmadaw's patronage apparatus) financially solvent.



Policy responses and recommended actions

Weak governance and pervasive corruption create a challenging environment for the implementation and enforcement of effective policy action to address the illicit flow of timber. There is no substitute for broad-scale institutional reform and anti-corruption mechanisms. Still, our analysis of the key network of actors complicit in the illicit flow of timber has highlighted a set of key actions to curb the trade.

The following points outline recommended policies and actions focused on a range of stakeholders, both within Myanmar and outside, that were raised in the interviews conducted for this report and supported by our own judgement about the best steps to be taken:

- 1. Support the development of Myanmar's timber industry. The Myanmar government has previously tried to promote the development of the country's value-add timber industry by banning the export of unprocessed logs. Multiple interviewees indicated that further support, investment and incentives for downstream timber-processing in Myanmar could still be an effective way to tackle the illegal industry. Any such initiative should, however, be timed to support the country's return to democratic government, and not before.
- 2. Encourage Chinese government enforcement activities. Chinese enforcement to date has been sporadic. However, the few crackdowns that have occurred had a temporary impact on the flow of illicit timber. The most recent, in 2019, focused on the role of Chinese government officials as part of a national anti-corruption drive.

Buddhist monks take part in a protest against the military junta as a truck transporting timber passes by. It is possible that army authorities are consolidating their hold over the illegal timber economy. © Thierry Falise/LightRocket via Getty Images

Continued actions that frame the illicit flow of timber in terms of corruption may help to spur further action. In this regard, the identification by Beijing authorities of Yunnan-based individuals and businesses involved in the trade could be useful to international law-enforcement efforts. It would also be useful if China were to explicitly include illegally sourced timber imports under its amended Forest Law. At present, the law contains an element of ambiguity concerning a timber company's culpability if it claims to lack knowledge about the provenance of its supplies. The law's effectiveness will therefore depend on how rigorously it is enforced.¹⁴⁹ Some clarity on this point might emerge after the UN Conference on Biodiversity in Kunming, in China's Yunnan province, in October 2021, taking place as this report goes to press. Speaking at the conference, the executive secretary of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES) called for 'transformative change' to reduce the rate of damage being done to ecosystems. Among the steps she recommended was to restrict unsustainable and illegal logging. Considering that the IPBES has been tracking global biodiversity threats on a long-term basis, the fact that such statements were made at a prominent panel at the Kunming conference means that China is likely to take note of growing international concern over illegal logging. Whether this leads to a tightening of the legal regime within China will, however, only become clear in the months ahead.¹⁵⁰

- 3. Invest in technology to support surveillance and enforcement activities in Myanmar's forests. The Myanmar Forest Department's lack of human resources and investigators could be partly overcome through the use of technology. Such technologies could include remote sensing and geographic-information-system mapping that would assist in the regular monitoring of deforestation in key logging areas. However, any such investment should ideally occur after the restoration of democratic rule.¹⁵¹
- 4. Promote the role of local and international NGOs and civil society groups in tackling the illicit timber trade. Non-government actors have a critical role to play in tracking illicit flows of timber from Myanmar to China. One possibility might be to introduce a system for selected communities to document and track the locations and pace of logging activities in nearby forests. This could help raise public awareness of the scale of the problem and, under current circumstances, particularly following the February 2021 coup, is perhaps the most that can be done.
- 5. Promote corporate social responsibility in the timber industry. Businesses in Myanmar and China play a significant role across the timber supply chain, and there is little chance that the flow of illicit timber will stop while these businesses continue to exploit weak institutions and governance. Setting up mechanisms and activities that would promote responsible business practices is another means of curbing the illicit flow of timber from Myanmar. A Kachin official suggested that 'what we want is more responsible business investment in the country. There is plenty of room to exploit the legal loopholes, but our request would be to consider how to be more socially aware and responsible when it comes to environmental concerns.'¹⁵² Following the coup, foreign governments are keen to track the military regime's sources of revenue and subject them to sanctions. Thus, financial intelligence could play a crucial role in targeting companies in the timber trade that are owned by political cronies. This intelligence effort has to be government-led but will rely on information supplied in part by international companies that deal with Myanmar-based firms.

NOTES

- See Myanmar's tainted timber and the military coup, Environmental Investigation Agency, last updated 28 June 2021, https://eia-international.org/forests/myanmarstainted-timber-and-the-military-coup/.
- 2 Ibid.
- 3 Ibid.
- 4 Myanmar's illegal trade continues despite COVID-19, ASEAN Today, 8 May 2020, https://www.aseantoday.com/2020/05/ myanmars-illegal-timber-trade-continues-despite-covid-19/.
- 5 Sheryl Lee Tian Tong, EU sanctions no 'silver bullet' against Myanmar's timber trade, experts say, Mongabay, 22 July 2021, https://news.mongabay.com/2021/07/eu-sanctionsno-silver-bullet-against-myanmars-illegal-timber-tradeexperts-say/.
- 6 Liz Kimbrough, Sounding the alarm about illegal logging? There's an app for that, Mongabay, 17 July 2020, https:// news.mongabay.com/2020/07/sounding-the-alarm-aboutillegal-logging-theres-an-app-for-that/.
- 7 Myanmar's mountainous borderland regions have fostered analysis about such state-evading practices. See, for instance, James C. Scott, *The Art of Not Being Governed*: An Anarchist History of Upland Southeast Asia. New Haven: Yale University Press, 2009.
- 8 For example, see Forest crimes in Cambodia: Rings of illegality in Prey Lang Wildlife Sanctuary, Global Initiative Against Transnational Organized Crime, March 2021, https:// globalinitiative.net/analysis/forest-crimes-cambodia/.
- 9 Interview with Kachin state official, 12 March 2021.
- 10 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021.
- 11 Jason Tower and Priscilla A Clapp, Chaos sparked by Myanmar coup fuels Chinese cross-border crime, United States Institute of Peace, 21 April 2021, https://www.usip. org/publications/2021/04/chaos-sparked-myanmar-coupfuels-chinese-cross-border-crime.
- 12 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021. Also see The Nation, Chavalit and the Salween saga, 5 March 1998, https://www. burmalibrary.org/reg.burma/archives/199803/msg00122. html.

- 13 Identity Crisis: Ethnicity and conflict in Myanmar, International Crisis Group, Asia Report No. 312, 28 August 2020, https://www.ecoi.net/en/file/local/2037092/312identity-crisis-myanmar-ethicity.pdf.
- 14 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021.
- 15 Lauren Crothers, Late timber kingpin who plundered Myanmar's forests unmasked, Mongabay, 5 March 2019, https://news.mongabay.com/2019/03/late-timber-kingpinwho-plundered-myanmars-forests-unmasked/.
- 16 Environmental Investigation Agency, State of corruption: The top-level conspiracy behind the global trade in Myanmar's stolen teak, February 2019, https://eia-international.org/wpcontent/uploads/EIA-report-State-of-Corruption.pdf, p 16.
- 17 Emily Fishbein, The many-sided fight over northern Kachin's forests, Frontier Myanmar, 4 June 2020, https:// www.frontiermyanmar.net/en/the-many-sided-fight-overnorthern-kachins-forests/.
- 18 Global Witness, A conflict of interest: The uncertain future of Burma's forests, October 2003, https://cdn2. globalwitness.org/archive/files/import/03sep3%20 conflict%20of%20interests%2060-89.pdf, p 76.
- 19 Environmental Investigation Agency, Organized chaos: The illicit overland timber trade between Myanmar and China, September 2015, p 5, https://eia-international.org/wpcontent/uploads/EIA-Organised-Chaos-FINAL-Ir1.pdf.
- 20 Justine E Hausheer and Timothy Boucher, Illegal logging and energy shortages pressure Myanmar's forests, Nature, 9 July 2018, https://blog.nature.org/science/2018/07/09/illegallogging-energy-shortages-pressure-myanmars-forests/.
- 21 Daniel Quinlan, Campaigners in Myanmar's Tanintharyi region oppose \$21m conservation project, Mongabay,
 27 May 2020, https://news.mongabay.com/2020/05/ campaigners-in-myanmars-tanintharyi-region-oppose-21mtop-down-conservation-project/.
- 22 Esther Htusan, Myanmar forest-cutting continues despite government efforts, *The Jakarta Post*, 2 September 2016, https://www.thejakartapost.com/seasia/2016/09/02/ myanmar-forest-cutting-continues-despite-governmentefforts.html.

- 23 Huang Wenbin and Sun Xiufang, Tropical hardwood flows in China: Case studies of rosewood and okoumé, Forest Trends, p 4, https://www.forest-trends.org/wp-content/ uploads/imported/tropical-hardwood-flows-in-chinav12_12_3_2013-pdf.pdf.
- 24 Lee Chen, China's hunger for rosewood helps fund armed conflicts in South East Asia and Africa, Mizzima, 20 September 2020, https://www.mizzima.com/article/chinas-hungerrosewood-helps-fund-armed-conflicts-south-east-asia-andafrica.
- 25 Evelyn Chang, China's giant middle class is still growing and companies from Walmart to start-ups are trying to cash in, CNBC, 30 September 2019, https://www.cnbc. com/2019/09/30/chinas-giant-middle-class-is-still-growingand-companies-want-in.html.
- 26 Michael Jenkins, Kerstin Canby and Genevieve Bennett, How to end deforestation? Two decades of lessons learned in the Greater Mekong, Ecosystem Marketplace, 19 December 2019, https://www.ecosystemmarketplace.com/articles/ looking-back-on-two-decades-in-the-greater-mekong-wecan-prevent-deforestation-long-before-it-happens/.
- 27 ASEAN Today, Myanmar's illegal timber trade continues despite COVID-19, 8 May 2020, https://www.aseantoday. com/2020/05/myanmars-illegal-timber-trade-continuesdespite-covid-19/.
- 28 Ashoka Mukpo, China's revised forest law could boost efforts to fight illegal logging, Mongabay, 19 March 2020, https://news.mongabay.com/2020/03/chinas-revised-forestlaw-could-boost-efforts-to-fight-illegal-logging/.
- 29 Interview with Kachin state official, 12 March 2021.
- 30 Emmanuel Freudenthal, Burning down the house: Myanmar's destructive charcoal trade, Resilience, 2 November 2017, https://www.resilience.org/stories/2017-11-02/burning-down-the-house-myanmars-destructive-charcoal-trade/.
- 31 Charlie Campbell, Burma's logging ban is great for forests, but a disaster for its working elephants, *Time*, 31 March 2014, https://time.com/43317/burma-logging-banelephants-at-risk/.
- 32 Major Dutch timber company found guilty of dealing in illegal teak, Mongabay, 2 November 2017, https://news.mongabay. com/2017/11/major-dutch-timber-company-found-guiltyof-dealing-in-illegal-teak/.
- 33 Nyein Nyein, Europe's rich continue to buy Myanmar's illegal teak: EIA, The Irrawaddy, 28 May 2020, https://www. irrawaddy.com/in-person/interview/europes-rich-continuebuy-myanmars-illegal-teak-eia.html.
- 34 Alistair Walsh, Superyacht built using illegal timber, Deutsche Welle, 5 April 2017, https://www.dw.com/en/superyachtbuilt-using-illegal-timber/a-38316296.
- 35 Investigation exposes European firms exploiting loophole to import Myanmar teak, Mongabay, 28 May 2020, https:// news.mongabay.com/2020/05/investigation-exposeseuropean-firms-exploiting-loophole-to-import-myanmarteak/.

- 36 Alistair Walsh, Superyacht built using illegal timber, Deutsche Welle, 5 April 2017, https://www.dw.com/en/ superyachtbuilt-using-illegal-timber/a-38316296.
- 37 Paul Salopek, After a century of logging, Myanmar struggles to preserve its teak groves, *National Geographic*, 5 August 2020, https://www.nationalgeographic.com/history/2020/08/ after-century-logging-myanmar-struggles-preserve-teakgroves/.
- 38 There is a lucrative racket in cooking-gas cylinders smuggled in from India, where they cost one-eighth of the price in Myanmar.
- 39 Justine E Hausheer and Timothy Boucher, Illegal logging and energy shortages pressure Myanmar's forests, *Nature*, 9 July 2018, https://blog.nature.org/science/2018/07/09/illegallogging-energy-shortages-pressure-myanmars-forests/.
- 40 Interview with analyst based in Shan state, 12 March 2021.
- 41 Khin Su Wai, Timber smuggling continues in Sagaing despite ban, virus, *Myanmar Times*, 10 July 2020, https://www. mmtimes.com/news/timber-smuggling-continues-sagaingdespite-ban-virus.html.
- 42 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021.
- 43 Interview with Yangon-based analyst, 9 March 2021.
- 44 Interview with analyst based in Shan state, 12 March 2021.
- 45 Interview with Kachin state forest and environmental advocate, 9 March 2021.
- 46 Organized Chaos: The illicit overland timber trade between Myanmar and China, Environmental Investigation Agency, September 2015, p 7, https://eia-international.org/wpcontent/uploads/EIA-Organised-Chaos-FINAL-Ir1.pdf.
- 47 Quoted in Kevin Woods, Conflict timber along the China– Burma border, in Eric Tagliacozzo and Wen-Chin Chang, eds., Chinese Circulations: Capital, Commodities and Networks in Southeast Asia. London: Duke University Press, 2011, p 484.
- 48 Alessandro Rippa, How timber trade is shifting Sino-Myanmar relations, China-US Focus, 18 August 2015, https://www.chinausfocus.com/foreign-policy/how-timbertrade-is-shifting-sino-myanmar-relations.
- 49 Kevin Woods, Conflict timber along the China-Burma border, in Eric Tagliacozzo and Wen-Chin Chang, eds, Chinese Circulations: Capital, Commodities and Networks in Southeast Asia. London: Duke University Press, 2011, pp 488–489.
- 50 Huang Wenbin and Sun Xiufang, Tropical hardwood flows in China: Case studies of rosewood and okoumé, Forest Trends, 3 December 2015, p 5, https://www.forest-trends.org/ wp-content/uploads/imported/tropical-hardwood-flows-inchina-v12_12_3_2013-pdf.pdf.
- 51 Tom Phillips, Surge in illegal logging by Chinese in Myanmar alarms activists, *The Guardian*, 17 September 2015, https:// www.theguardian.com/world/2015/sep/17/illegal-timbermyanmar-china-forests.
- 52 David Doyle, Myanmar's logging ban feeds shadow economy of illegal trade, Mongabay, 1 November 2016, https://news.

mongabay.com/2016/11/myanmars-logging-ban-feedsshadow-economy-of-illegal-trade/.

- 53 Interview with Kachin state official, 12 March 2021.
- 54 Interview with Myanmar analyst of China–South East Asia relations, 5 March 2021. Also see the details, in Burmese, at the Forestry Department's website, where they announce recent raids, such as 'Illegal timber and forest products seized', Ministry of Environment and Forestry, https://www. forestdepartment.gov.mm/news/3931. This report describes the seizure of timber and other products, including snakes, in Bago region and also along the border between the Shan state and China.
- 55 Radhika Jha, The waterway to Mandalay: A classic riverboat journey, Outlook, 25 November 2015, https://www. outlookindia.com/outlooktraveller/explore/story/46839/thewaterway-to-mandalay-a-classic-riverboat-journey.
- 56 Alessandro Rippa, How timber trade is shifting Sino-Myanmar relations, China–US Focus, 18 August 2015, https://www.chinausfocus.com/foreign-policy/how-timbertrade-is-shifting-sino-myanmar-relations.
- 57 Hereward Holland, Myanmar's pending ceasefire jeopardized by skirmishes over illegal logging, *National Geographic*, 20 May 2014, https://www.nationalgeographic.com/ news/2014/5/140520-myanmar-kachin-independencearmy-illegal-logging-teak-china-world/.
- 58 Brent Crane, Illegal logging 'ravaging' Myanmar's Indawgyi Lake Wildlife Reserve, Mongabay, 16 November 2016, https://news.mongabay.com/2016/11/illegal-loggingravaging-myanmars-indawgyi-lake-wildlife-reserve/.
- 59 Ann Wang, Checkpoint China: The shadowy world of timber smuggling, Mongabay, 31 October 2017, https://news. mongabay.com/2017/10/checkpoint-china-the-shadowyworld-of-timber-smuggling/.
- 60 Ibid.
- 61 Interview with Myanmar analyst of China–South East Asia relations, 5 March 2021.
- 62 Lindsay Stubbs, In Myanmar's remote north, China is the key, Nikkei Asia, 5 February 2020, https://asia.nikkei.com/Editors-Picks/Tea-Leaves/In-Myanmar-s-remote-north-China-isthe-key.
- 63 Khin Su Wai, Timber smuggling continues in Sagaing despite ban, virus, Myanmar Times, 10 July 2020, https://www. mmtimes.com/news/timber-smuggling-continues-sagaingdespite-ban-virus.html.
- 64 Jennifer Rigby, Myanmar's forests face myriad problems as logging ban continues, Mongabay, 29 September 2016, https://news.mongabay.com/2016/09/myanmars-forestsface-myriad-problems-as-logging-ban-continues/.
- 65 Jeremy Hance, Just how bad is the logging crisis in Myanmar? 72 percent of exports illegal, Mongabay, 26 March 2014, https://news.mongabay.com/2014/03/justhow-bad-is-the-logging-crisis-in-myanmar-72-percent-ofexports-illegal/.

- 66 Poppy McPherson, Chain saw injuries in Myanmar tied to illegal logging, Earth Journalism Network, 12 February 2017, https://earthjournalism.net/stories/chain-saw-injuries-inmyanmar-tied-to-illegal-logging.
- 67 Ann Wang and Genevieve Belmaker, A fight to control chainsaws in Myanmar could turn the tide on illegal logging, Mongabay, 4 May 2017, https://news.mongabay. com/2017/05/a-fight-to-control-chainsaws-in-myanmarcould-turn-the-tide-on-illegal-logging/.
- 68 Htet Naing Zaw, People's militias operate unlawfully: Myanmar MP, Irrawaddy, 13 September 2019, https://www. irrawaddy.com/news/burma/peoples-militias-operateunlawfully-myanmar-mp.html.
- 69 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021.
- 70 Aimee Gabay, Threatened species caught in crossfire of ongoing land conflict in Myanmar, Mongabay, 10 September 2020, https://news.mongabay.com/2020/09/threatenedspecies-caught-in-crossfire-of-ongoing-land-conflict-inmyanmar/.
- 71 Shreya Dasgupta, New report: Commercial agricultural expansion fueling illegal logging and land conflicts in Myanmar, Mongabay, 12 March 2015, https://news. mongabay.com/2015/03/new-report-commercialagricultural-expansion-fueling-illegal-logging-and-landconflicts-in-myanmar/.
- 72 Global forestry enforcement: Strengthening law enforcement cooperation against forestry crime, INTERPOL, April 2019, p 12, https://www.interpol.int/content/download/5149/file/ Global%20Forestry%20Enforcement%20Prospectus%20 2019-web.pdf.
- 73 Interview with senior Myanmar government official, 8 March 2021.
- 74 Ibid.
- 75 See, for example, Jason Tower and Priscilla A Clapp, Myanmar: Army moves against Chinese crime groups in autonomous zones, United States Institute of Peace, 26 January 2021. https://www.usip.org/publications/2021/01/ myanmar-army-moves-against-chinese-crime-groupsautonomous-zones.
- 76 Myanmar's illegal timber trade continues despite COVID-19, ASEAN Today, 8 May 2020, https://www.aseantoday. com/2020/05/myanmars-illegal-timber-trade-continuesdespite-covid-19/.
- 77 Jennifer Rigby, Myanmar's forests face myriad problems as logging ban continues, Mongabay, 29 September 2016, https://news.mongabay.com/2016/09/myanmars-forestsface-myriad-problems-as-logging-ban-continues/.
- 78 Interview with senior Myanmar government official, 8 March 2021.
- 79 Interview with Yangon-based analyst, 9 March 2021; for broader context, see the Burmese language report in Maung Ta, Mandalay Division government orders action against

illegal logging under three laws, 7 Day News, 11 May 2017, https://7day.news/တရားမဝင်-သစ်ဆိုသူများကိုဥပဒေသုံးခုဖင္ပြံ--အရႊယူရန်-မန္တ လႊေတိုးအစိုးအာမို့နာ့တ်-----95877. It explains that there were more than 1 090 seizures of illegal timber in Mandalay region in the 2016–2017 financial year, with more than 3 000 tonnes of timber and about 280 illegal loggers arrested. Around the same time, the Thai-language media covered some large-scale seizures in Myanmar (See, for example, MGR Online, Myanmar reveals 40 000 tonnes of illegal timber seized in 2016, 23 February 2017, https:// mgronline.com/indochina/detail/960000018671.)

- 80 In Burmese language sources, we found an example from Bago region in 2020, in which a local civilian official and two military personnel were indicted by authorities for facilitating the illegal transportation of timber. The report suggests that the military members were dealt with in the military justice system, with no further details released (Sai Ko Ko Tun, Separate action taken against two military personnel and a ward administrator for accepting bribes over 20 million kyats in illegal timber case, 7 Day News, 19 July 2020, https://7day.news/თရာ:မဝင်သစ်ကိစ္စ -ကျပ်သိန်း-၂၀၀-ကျ၁်-လာဘ် ငွယူခဲ့သည့်တပ်မတင်ာသာ:နှစ်ဦးနှင့်ရပ်ကျ:အုပ်ချုပ်ရငေမှူ :ကိုသီးခဉ်းစီ အရငေယူ -----192688.
- 81 Gabriel Crossley, In crackdown on fraud from Myanmar, China authorities target suspects' families, Reuters, 8 June 2021, https://www.reuters.com/world/asia-pacific/ crackdown-fraud-myanmar-china-authorities-targetsuspects-families-2021-06-08/.
- 82 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021.
- 83 Interview with Yangon-based businessman, 12 March 2021.
- 84 Ibid.
- 85 Ibid.
- 86 David Doyle, Myanmar's logging ban feeds shadow economy of illegal trade, Mongabay, 1 November 2016, https://news. mongabay.com/2016/11/myanmars-logging-ban-feedsshadow-economy-of-illegal-trade/. For further context, see the discussion of timber seizures in the Burmese language media, such as: Min Latt, Illegal logging in Mandalay region saw a drop in seizures of teak and hardwood compared to the previous fiscal year, with more than 1,000 tonnes of timber seized, Eleven Media Group, 30 September 2020, https://bit.ly/3s0DmsY.
- 87 Nyein Nyein, German company found supplying illegal Myanmar teak to EU, The Irrawaddy, 22 March 2019, https:// www.irrawaddy.com/news/burma/german-company-foundsupplying-illegal-myanmar-teak-eu.html.
- 88 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021.
- 89 Esther Htusan, Myanmar forest-cutting continues despite government efforts, *The Jakarta Post*, 2 September 2016, https://www.thejakartapost.com/seasia/2016/09/02/ myanmar-forest-cutting-continues-despite-governmentefforts.html.

- 90 Interview with Yangon-based businessman, 12 March 2021.
- 91 Comment by veteran environmental-crime investigator, personal correspondence, 5 June 2021.
- 92 Interview with Kachin state official, 12 March 2021.
- 93 See Nicholas Farrelly, Long shadow of war in Kachin State, New Mandala, 8 February 2011, https://www.newmandala. org/long-shadow-of-war-in-kachin-state/. For some historical context, see Nicholas Farrelly, Armed Groups at the Myitkyina Manau, New Mandala, 31 January 2008, https://www.newmandala.org/armed-groups-at-themyitkyina-manau/.
- 94 Kevin Woods, Conflict timber along the China–Burma border, in Eric Tagliacozzo and Wen-Chin Chang, eds, Chinese Circulations: Capital, Commodities and Networks in Southeast Asia. London: Duke University Press, 2011, p 490.
- 95 Daniel Quinlan, Campaigners in Myanmar's Tanintharyi region oppose \$21m conservation project, Mongabay, 27 May 2020, https://news.mongabay.com/2020/05/ campaigners-in-myanmars-tanintharyi-region-oppose-21mtop-down-conservation-project/.
- 96 Patrick Meehan, Fortifying or fragmenting the state? The political economy of the opium/heroin trade in Shan State, Myanmar, 1988–2013, *Critical Asian Studies*, 47, 2 (2015), p 275.
- 97 Interview with Kachin state official, 12 March 2021.
- 98 Wen-Chin Chang, Beyond Borders: Stories of Yunnanese Chinese Migrants of Burma. Ithaca and London: Cornell University Press, 2014, p 4, https://library.oapen.org/ bitstream/handle/20.500.12657/30805/642697. pdf?sequence=1&isAllowed=y.
- 99 Ibid., p 3.
- 100 Interview with Myanmar analyst of China–South East Asia relations, 5 March 2021.
- 101 Interview with Kachin state forest and environmental advocate, 9 March 2021.
- 102 Vicky Lee, How to stop the trade in illegal timber between China and Myanmar, China Dialogue, 18 September 2015, https://chinadialogue.net/en/business/8178-how-to-stopthe-trade-in-illegal-timber-between-china-and-myanmar/.
- 103 Organized chaos: The illicit overland timber trade between Myanmar and China, Environmental Investigation Agency, September 2015, p 14, https://eia-international.org/wpcontent/uploads/EIA-Organised-Chaos-FINAL-Ir1.pdf.
- 104 Ibid., p 12 and p 16.
- See http://www.dhms.gov.cn/jtj/Web/_
 F0_0_048M3ZMW553WATHBMZ6GNG95Z6.
 htm. Also: Political Commissar for Protecting Private Interest: An analysis of Yang Minjin, 16 July 2021, http://www.ynfzb.cn/Ynfzb/XinWen/201907289344.
 shtml?from=singlemessage&isappinstalled=0.
- 106 Jason Tower and Priscilla Clapp, Myanmar's casino cities: The role of China and transnational criminal networks, United States Institute of Peace, Special Report No. 471, July 2020, p 4, https://www.usip.org/sites/default/

files/2020-07/20200727-sr_471-myanmars_casino_cities_ the_role_of_china_and_transnational_criminal_networks-sr. pdf.

107 Interview with Hong Kong-based investor, 4 March 2021.

108 Ibid.

- 109 Ludovica Picone, Myanmar's resource curse, The World Weekly, 23 July 2015, https://www.theworldweekly.com/ reader/view/1579/myanmars-long-road-to-peace.
- 110 Doug Bock Clark and Corey Pattison, China is playing peacemaker in Myanmar, but with an ulterior motive, Foreign Policy, 18 April 2017, https://foreignpolicy.com/2017/04/18/ china-is-playing-peacemaker-in-myanmar-but-with-anulterior-motive-myitsone-dam-energy/.
- 111 Bertil Lintner, Myanmar a perfect fit on China's Belt and Road, Asia Times, 27 January 2020, https://asiatimes.com/2020/01/ myanmar-a-perfect-fit-on-chinas-belt-and-road/.
- 112 Bill Birtles, Myanmar's coup against Aung San Suu Kyi puts China in a tricky spot. But there's also plenty to gain, ABC News (Australia), 3 February 2021, https://www. abc.net.au/news/2021-02-03/toppling-of-aung-sansuu-kyi-puts-china-in-a-tricky-spot/13115916; Daniel R Russel and Blake H Berger, Weaponizing the Belt and Road Initiative, Asia Society Policy Institute, September 2020, p 24, https://asiasociety.org/sites/default/files/2020-09/ Weaponizing%20the%20Belt%20and%20Road%20 Initiative_0.pdf
- 113 China News Network, Yunnan armed police crackdown on mega cross-border smuggling criminal groups and seized hundreds of millions of smuggled assets, 24 July 2019, http://yn.sina.com.cn/news/b/2019-07-24/detailihytcerm5831090.shtml.
- 114 Yunnan Provincial Commission for Discipline and Investigation, Yang Mingjin, former political commissar of the Public Security Border Defence Brigade of Ruili City, was transferred to the procuratorial organ for review and prosecution on suspicion of accepting bribes, 13 June 2019, http://ynjjjc.gov.cn/html/2019/ dangjizhengwuchufen_0613/68826.html. See also: Dehong Commission for Discipline and Investigation, 13 June 2019, http://www.dhzjw.gov.cn/html/zjscdc_1608_33709.html.
- 115 Li Yan, Analysis of Yang Mingjin, political commissar of the Public Security Frontier Brigade of Ruili City, in serious violation of discipline and acts, 16 July 2021, Yunnan Legal News, http://www.ynfzb.chttp://www.ynfzb.cn/Ynfzb/ XinWen/201907289344.shtml?from=singlemessage&isappin stalled=0.
- 116 Ibid.
- 117 Dehong Prefecture Committee of the Communist Party of China, Yunnan Provincial People's Procuratorate decided to arrest Zhang Bin and Wang Yaxiong, 7 June 2019, http:// www.dehong.gov.cn/dhnews/dh/content-16-44792-1.html.
- 118 Interview with Myanmar analyst of China–South East Asia relations, 5 March 2021.

- 119 Interview with Kachin state forest and environmental advocate, 9 March 2021.
- 120 Esther Htusan, Myanmar forest-cutting continues despite government efforts, *The Jakarta Post*, 2 September 2016, https://www.thejakartapost.com/seasia/2016/09/02/ myanmar-forest-cutting-continues-despite-governmentefforts.html.
- 121 VOA News, Myanmar reporter killed while investigating illegal logging, 13 December 2016, https://www.voanews. com/east-asia/myanmar-reporter-killed-while-investigatingillegal-logging.
- 122 Ann Wang, Myanmar struggles to fight the crimes of illegal logging, Mongabay, 1 November 2017, https://news. mongabay.com/2017/11/myanmar-struggles-to-fight-thecrimes-of-illegal-logging/.
- 123 Andrea Chen, Chinese logging firms seek intervention over seized staff and equipment in Myanmar, *South China Morning Post*, 26 January 2015, https://www.scmp.com/news/china/ article/1692219/chinese-logging-firms-seek-interventionover-seized-staff-and-equipment.
- 124 Irrawaddy, China Incensed over life sentences for Kachin State Loggers, 23 July 2015, https://www.irrawaddy.com/ news/burma/china-incensed-over-life-sentences-for-kachinstate-loggers.html.
- 125 Goh Sui Noi, Chinese firms going overseas beginning to factor in the need to guard against security risk, *Straits Times*, 10 December 2017, https://www.straitstimes.com/asia/eastasia/chinese-firms-going-overseas-beginning-to-factor-inthe-need-to-guard-against.
- 126 Environmental Investigation Agency, Organized Chaos: The illicit overland timber trade between Myanmar and China, September 2015, p 18, https://eia-international.org/wpcontent/uploads/EIA-Organised-Chaos-FINAL-Ir1.pdf.
- 127 Poppy McPherson, Chain saw injuries in Myanmar tied to illegal logging, Earth Journalism Network, 12 February 2017, https://earthjournalism.net/stories/chain-saw-injuries-inmyanmar-tied-to-illegal-logging.
- 128 World Bank, Tax revenue (% of GDP) Myanmar, https://data.worldbank.org/indicator/GC.TAX.TOTL. GD.ZS?locations=MM.
- 129 Dev Kar and Joseph Spanjers, Flight capital and illicit financial flows to and from Myanmar: 1960–2013, Global Financial Integrity, p vii, https://www.gfintegrity.org/wpcontent/uploads/2015/09/Myanmar-Report-Final-1.pdf.
- 130 Brian Raymond Moore, How Myanmar can curb illicit financial flows, Pacific Council on International Policy, 18 January 2017, https://www.pacificcouncil.org/newsroom/ how-myanmar-can-curb-illicit-financial-flows.
- 131 Dev Kar and Joseph Spanjers, Flight capital and illicit financial flows to and from Myanmar: 1960–2013, Global Financial Integrity, September 2015, https://www.gfintegrity.org/wpcontent/uploads/2015/09/Myanmar-Report-Final-1.pdf, p. 14.

- 132 Interview with Myanmar analyst of China–South East Asia relations, 5 March 2021.
- 133 See, for example, Patrick M Jost and Harjit Singh Sandhu, The hawala alternative remittance system and its role in money laundering, United States Treasury, n.d., https:// www.treasury.gov/resource-center/terrorist-illicit-finance/ documents/fincen-hawala-rpt.pdf.
- 134 Financial Action Task Force, Anti-money laundering and counter-terrorist financing measures: Myanmar mutual evaluation report, September 2018, p 23, https://www. fatf-gafi.org/media/fatf/documents/reports/mer-fsrb/APG-Mutual-Evaluation-Report-Myanmar.pdf.
- 135 Interview with Yangon-based businessman, 12 March 2021.
- 136 Interview with Hong Kong-based investor, 4 March 2021.
- 137 Interview with Yangon-based analyst, 9 March 2021.
- 138 Ben Heubl, Myanmar's military coup linked to illegal deforestation, Engineering and Technology, 23 April 2021, https://eandt.theiet.org/content/articles/2021/04/myanmars-military-coup-linked-to-illegal-deforestation/.
- 139 Interview with senior Myanmar government official, 8 March 2021.
- 140 James Fair, COVID-19 lockdown precipitates deforestation across Asia and South America, Mongabay, 3 July 2020, https://news.mongabay.com/2020/07/covid-19-lockdownprecipitates-deforestation-across-asia-and-south-america/.
- 141 Paolo Omar Cerutti, EU and partner countries must protect gains in legal timber trade during COVID-19, Mongabay, 2 July 2020, https://news.mongabay.com/2020/07/eu-andpartner-countries-must-protect-gains-in-legal-timber-tradeduring-covid-19-commentary/.
- 142 Samuel Rubenfeld and Helen Koo, Myanmar Pearl, timber state-owned enterprises sanctioned by U.S., Kharon, 26 April 2021, https://brief.kharon.com/updates/myanmarpearl-timber-state-owned-enterprises-sanctioned-by-us/.
- 143 Daishi Chiba, Shin Watanabe and Yuichi Nitta, Chinese companies corralling land around world, Nikkei Asia,

13 July 2021, https://asia.nikkei.com/Spotlight/Datawatch/ Chinese-companies-corralling-land-around-world.

- 144 Faith Doherty, Opinion: Perilous future for Myanmar's pristine forests after coup, The Third Pole, 21 June 2021, https://www.thethirdpole.net/en/nature/perilous-future-formyanmars-pristine-forests-after-coup/.
- 145 George McLeod, Myanmar's generals aren't going anywhere, The Diplomat, 3 May 2021, https://thediplomat. com/2021/05/myanmars-generals-arent-going-anywhere/.
- 146 Robert Bociaga, Resources and power in Myanmar, Asia Media Centre, 13 July 2021, https://www.asiamediacentre. org.nz/opinion/resources-and-power-in-myanmar/.
- 147 Isobel Van Hagen, Myanmar military leaders looking to "fund coup" with auction of illegal timber, Organized Crime and Corruption Reporting Project, 25 May 2021, https://www. occrp.org/en/daily/14475-myanmar-military-leaders-lookingto-fund-coup-with-auction-of-illegal-timber.
- 148 Myanmar regime's cabinet includes some old China hands, The Irrawaddy, 29 March 2021, https://www.irrawaddy.com/ opinion/myanmar-regimes-cabinet-includes-old-china-hands. html.
- 149 China introduces new law to safeguard forests and improve governance, ClientEarth, 8 July 2020, https://www. clientearth.org/latest/latest-updates/opinions/chinaintroduces-new-law-to-safeguard-forests-and-improvegovernance/.
- 150 Ashoka Mukpo, China's revised forest law could boost efforts to fight illegal logging, Mongabay, 19 March 2020, https://news.mongabay.com/2020/03/chinas-revised-forestlaw-could-boost-efforts-to-fight-illegal-logging/.
- 151 Interview with Myanmar analyst of China–South East Asia relations, 5 March 2021.
- 152 Interview with Kachin state official, 12 March 2021.





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