



global witness

# JADE:

## MYANMAR'S "BIG STATE SECRET"

OCTOBER 2015





## ACKNOWLEDGMENTS .....

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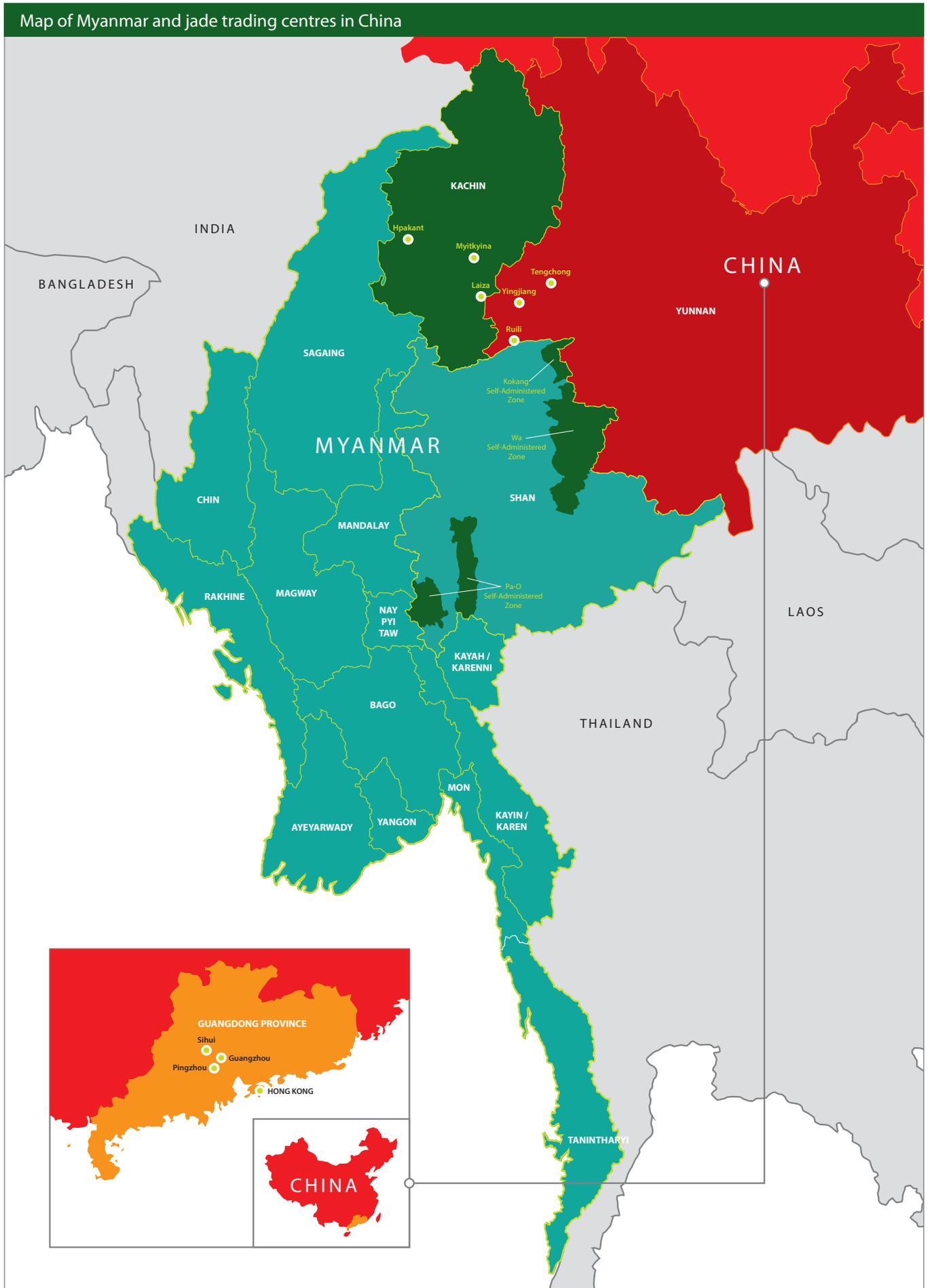
In reviewing the environmental and social impacts of jade mining, we have been able to draw on research findings generously shared with us by the Kachin Development Networking Group (KDNG).

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## EXECUTIVE SUMMARY<sup>i</sup>

Since 2011, Myanmar's rebranded government has told the world it is transitioning from a pariah state run by a ruthless military dictatorship to a civilian regime committed to wholesale political and economic reforms.

In important respects, there has been real change. Oft-cited examples include the release of Aung San Suu Kyi and other political prisoners, and the government's peace talks with ethnic armed groups. But in other critical areas, the reformist narrative bears little scrutiny. Nowhere is this truer than in the jade sector.

Drawing on over a year of investigations, this report shows for the first time how a multi-billion dollar trade in one of the planet's most precious gemstones is tightly controlled by the same military elites, US-sanctioned drug lords and crony companies that the government says it is consigning

to the past. Companies owned by the family of former dictator Than Shwe and other notorious figures are creaming off vast profits from the country's most valuable natural resource, and the world's finest supply of a stone synonymous with glitz and glamour. Meanwhile, very few revenues reach the people of Kachin State, the site of the Hpakant jade mines, or the population of Myanmar as a whole.

As the country approaches an historic election, the importance of these findings to Myanmar's future is hard to overstate. Our investigations show that the elites who between them have most to lose from an open and fair future also have ready access to a vast slush fund in the shape of the jade sector. This raises urgent questions for reformers and their international partners. What is happening to all this jade money? Is it only being spent on real estate, fast cars and lavish parties, or is it being used for political purposes as well?



Traditionally associated with royalty in China, jade has long been valued above gold and silver and is now a status symbol for the expanding class of super-rich. In 2014, a 27 piece jadeite necklace sold in Hong Kong for a record-breaking US\$27.44 million after a seven-way bidder battle.

CREDIT: TYRONE SIU/Reuters/Corbis

<sup>i</sup> References for the points made in this section can be found in the main body of the report. The pull-out quotes are all from interviews by Global Witness in 2014 and 2015.

*"Hpakant is one of the most valuable places on earth because you can earn billions from a very small area... and yet only a small number of people are getting advantages."*

Community leader, Kachin State



Kachin State in northern Myanmar is home to the world's largest and most valuable jade deposits. Instead of helping to drive much-needed local development, and improve infrastructure and healthcare for ordinary people, these riches are pocketed by a small and powerful elite.

The sums involved in what one industry representative calls "the government's big state secret" are staggering. Until now the jade sector's worth has been almost impossible to determine. However, based on new research and analysis, Global Witness estimates that the value of official jade production in 2014 alone was well over the US\$12 billion indicated by Chinese import data, and appears likely to have been as much as US\$31 billion. To put it in perspective, this figure equates to 48% of Myanmar's official GDP and 46 times government expenditure on health.

Clearly, if openly, fairly and sustainably managed, this industry could transform the fortunes of the Kachin population and help drive development across Myanmar. Instead, the people of Kachin State are seeing their livelihoods disappear and their landscape shattered by the intensifying scramble for their most prized asset. Conditions in jade mines are often fatally dangerous, while those who stand in the way of the guns and machines face land grabs, intimidation and violence.



*"Now jade mountains disappear in just a few days."*

Jade businessman

Government-licensed companies have brought in machines to carry out large-scale extraction in Hpakant, with operations ramping up massively over the past year. CREDIT: Minzayar

These injustices stoke unrest and resentment in one of the country's most volatile regions. The jade business is a significant driver of Myanmar's most intractable armed conflict, which pits the central government against the Kachin Independence Army / Kachin Independence Organisation (KIA/KIO). The industry generates funds for both sides in a war which has claimed thousands of lives and seen 100,000 people displaced since it reignited in 2011.

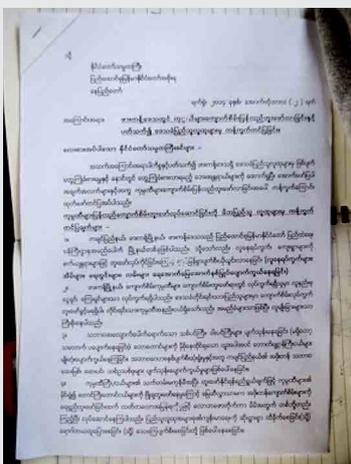
While the situation is dire, the opportunities for change are real. Government reformers have signed Myanmar up to the Extractive Industries Transparency Initiative (EITI), an international framework for combating corruption. They have

also initiated peace talks with the KIA/KIO. These are promising moves but both risk falling short if they do not address directly the need for a fairer and more accountable system of managing the country's most important natural resource.

Western governments that support the government, especially the US, have a key role to play here. With a range of sanctions imposed on individuals named in this report, and a leading role in the EITI process, the US is uniquely well placed to help take the jade trade out of the hands of military hardliners and crony companies. This report spells out precisely why it must use that leverage without delay.

## A call for change from Kachin State

In October 2014, 4,923 people in the jade mining township of Hpakant signed a letter to President Thein Sein demanding an end to the abuses by jade mining companies. The letter details devastating environmental and social impacts caused by company activities:



*“As part of jade mining activities in Hpakant, a limited number of capitalists have been granted permits for blocks, whereas local ethnic groups have been granted no jade blocks. Although certain companies are affiliated to ethnic groups, such affiliation is in title only and these companies are dominated by foreign nationals.”*

*“The mining companies are dynamiting the hills and mountains to allow exploration activities prior to the expiry of their contracts, and they are acting solely for their own benefit in the excavation of valuable jade via short-term rather than long-term processes. This poses a serious potential health hazard to residents, and causes a wide range of diseases or fatalities.”*

*“Companies do not systematically stabilise sites where they have undertaken deep excavations and created reservoirs. As a result, heavy rains cause reservoirs to burst, and reservoirs are also sometimes destroyed intentionally, leading to the death of cattle and loss of property. However, the companies never take responsibility for such incidents.”*

*“The huge vehicles used by the companies have left the streets congested, and accidents are frequent.”*

*“Although valuable resources, priceless gems, forests, and gold are all vanishing due to excavations by companies equipped with machinery, the public does not benefit from these activities. Conversely, people are suffering as a result of health hazards and are even dying due to the air pollution created by the dynamite mining of the companies.”*

*“Issuing grants to these companies to work on blocks will lead to a rapid decline in the state of local residents’ properties as well as the region’s valuable jade, leading to serious repercussions for the next generation.”*

## Life in the margins of Hpakant's jade rush

A single mother of three children who has lived in Maw Sizar – in the Hpakant area – since 1991, described to local researchers the impact of Kyaing International, a jade mining company owned by the family of former military dictator Than Shwe:

*“Up until around 2005 I had good opportunities to make a living for my family through small-scale jade trading. When the company arrived, however, I was told I must leave my house and accept one million kyats compensation. I did not wish to accept, but then backhoe diggers came and destroyed my home. This was the rainy season and my family and I had no shelter. Many others were in the same situation. In 2012 the company had to suspend its operations and I had opportunities once again to trade small amounts of jade dug in the company’s concession by artisanal miners. But then in 2014 the suspension was lifted, the police came and chased the small-scale miners away and the company returned to exploit the area once more.”*



Local people who traditionally made their living from jade have been systematically squeezed out by government-licensed concessionaires. Some make a living picking for pieces of jade in waste dumped by the companies. CREDIT: Minzayar

*“Out of all the money made [from jade] if even 1% was spent on healthcare, education and infrastructure in Kachin, it would make an immense difference. But the benefits just go to a handful.”*

Community leader, Kachin State

*“The Kachin State government must have the right to manage the natural resources in the state. Moreover, the local government and the local people must get involved in the management.”*

KDNG / Kachin State Natural Resources Development Policy Discussion Paper



As companies ramp up mining activity, life-threatening landslides are increasingly common. At this site, at least 20 people were killed in January 2015 when heavy rains caused a waste dump collapse. CREDIT: Minzayar



The colossal vehicles used by jade companies pose a daily threat to those living and working in Hpakant. Here, a mother holds the picture of her late son, killed in an accident while searching for jade in a company waste pile. CREDIT: Minzayar



Frantic jade extraction has destroyed Hpakant's environment, turning its mountains into craters, polluting its lakes and streams, felling its forests and – as shown in this picture taken in 2014 – causing flooding in Hpakant Town. CREDIT: KDNG



Drug user in Myitkyina, Kachin State – heroin and methamphetamine use is rampant amongst jade miners in Hpakant, and local people are increasingly taking a stand against the harm the spread of drugs is doing to their communities. CREDIT: Adam Dean

## Who's who, and how much are they making?

For years, Myanmar's jade sector has been mired in secrecy. Ordinary people have been unable to access even basic data on which companies hold mining licences; who those companies' real owners are; how licences are allocated; what the terms of their contracts are; what they are paying the government; and how much they are producing.

Because of this, little attention has so far been paid to who is really benefitting from the jade rush, or how this sits alongside the reform efforts. This report aims to begin to change that, identifying for the first time key players behind the companies awarded jade concessions by the government.

Myanmar's jade licensing system is wide open to corruption and cronyism. The main concessions are in government-controlled areas of Hpakant Township, Kachin State, and blocks are awarded through a centrally-controlled process which multiple industry sources say favours companies connected to powerful figures and high-ranking officials. In the words of one jade businessman, "if there is a big hat involved [in a bid], they will surely get it". Our list of those involved in the jade trade today reads like a who's who from the darkest days of junta rule in Myanmar.

In addition to the family of former dictator Than Shwe, they include:

– **Senior ruling party figures**, notably:

- Minister for Livestock, Fisheries and Rural Development, and former army commander in Kachin State, Ohn Myint;
- former General Secretary of the Union Solidarity and Development Party, retired army general Maung Maung Thein;
- Deputy Minister for Social Welfare, Relief and Resettlement and former army Brigadier-General Phone Swe;
- and Deputy Minister for Communications and Information Technology, and former major general and director of defence procurement at the Ministry of Defence, Win Than.

Global Witness research indicates that these figures are making vast amounts from jade. The Than Shwe, Maung Maung Thein and Ohn Myint families hold multiple concessions which between them generated pre-tax sales of US\$220 million at the 2014 jade emporium (the official government jade sale), and US\$67 million at the 2013 emporium. Another company which Global Witness believes to be part of the Than Shwe family group posted sales of another US\$150 million across the 2014 and 2013 emporiums combined. As the country heads towards election, when many fear hardliners may finance sectarian violence and dirty tricks, Myanmar's citizens urgently need to know where the jade money is going.



General Than Shwe



Minister Ohn Myint



Wei Hsueh Kang



Aike Htwe

Jade companies linked to former dictator Retired Senior General Than Shwe, former army commander of Kachin State and serving minister Ohn Myint, drug lord Wei Hsueh Kang and Ever Winner Company supremo Aike Htwe recorded around US\$430 million in pre-tax sales at the 2014 official government jade sale alone.

## Unapologetic Minister will 'dare slap anyone'

By DVB

5 February 2014 [Print](#) [Email](#) [Like](#) 0 [Tweet](#) 0 [G+](#)



Burma's Minister of Livestock Breeding, Fisheries and Rural Development, Ohn Myint, is under fire in Parliament for vile threats to rural residents in Tenasserim and Magwe divisions. An emergency proposal has been submitted for the government to take immediate action.

Minister for Livestock, Fisheries and Rural Development Ohn Myint was previously Myanmar's Northern Commander, the top general in Kachin State. He became notorious for a public speech in 2014 in which he threatened to slap faces, and suggested that anyone who opposed the government would be jailed. CREDIT: DVB

– **Myanmar's army** – the Tatmadaw holds official stakes in the jade sector, primarily through its companies Myanma Economic Holdings Limited and Myanmar Economic Corporation. Global Witness' analysis of 2014 emporium data suggests these companies sold the highest quality jade, commanding an average price of over US\$13,000 per kilogram. Between them, official emporium sales of army companies amount to US\$180 million in 2014 and US\$100 million in 2013. These firms are regarded as an off-budget fund for the Commander-in-Chief. Many people in Kachin State believe jade revenues are helping to underwrite the army's war against the Kachin Independence Army / Kachin Independence Organisation (KIA/KIO).

– **'Crony' companies** – firms that emerged and prospered under the Than Shwe military junta are key players in the jade business. Most notable are the Asia World group established by Kokang drug lord Lo Hsing-Han and the Htoo Group run by 'number one crony' Tay Za, both of whom are subject to US sanctions. Much more significant but virtually unknown is the powerful Ever Winner group of companies, which appears to encompass 12 jade mining firms. The Ever Winner firms between them made around US\$190 million in official emporium sales in 2014 and just over US\$120 million in 2013. Global Witness research indicates that its owners are connected to politically influential tycoons including Aung Ko Win, the head of KBZ Group and Myanmar's biggest bank, and media mogul Kyaw Win, the operator of Skynet satellite TV.

*"If military families do not have a jade mining company the others will kick them out. Those without one will be seen as black sheep. They will not be speaking the same language."*

Former official

### Narcotics Rewards Program: Wei Hsueh-Kang

BUREAU OF INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT AFFAIRS

#### WANTED



(Alias: Prasit Chivinnitpanya)

**Date of Birth:** 5/29/52

**Place of Birth:** China

**Height:** 5'6" **Weight:** 125 lbs

**Eyes:** Brown **Hair:** Black

**Race:** Asian **Nationality:** Chinese

**Wei Hsueh-Kang**, the commander of the United Wa State Army's (UWSA or WA) Southern Military Command, is wanted on Federal drug violations in the Eastern District of New York. The WA is currently the dominant heroin trafficking group in Southeast Asia, and possibly worldwide. Wei Hsueh-Kang is believed to be in hiding in Burma.

The U.S. Department of State is offering a **REWARD OF UP TO \$2 MILLION** for information leading to the arrest or conviction in the United States of Wei Hsueh-Kang.

If you have information, and you are outside the United States, please contact the nearest U.S. Embassy or Consulate. In the United States, please contact the DEA, FBI, or ICE office in your city.

**ALL IDENTITIES ARE KEPT STRICTLY CONFIDENTIAL**

Global Witness research indicates that infamous drug lord Wei Hsueh Kang, a long time financier of the United Wa State Army ethnic armed group, is behind a group of jade companies that are arguably the most dominant in Hpakant.

– **Drug lords** – Wei Hsueh Kang is a narcotics kingpin and long-time financier of the United Wa State Army / United Wa State Party (USWA/UWSP) ethnic armed group who has a US\$2 million US government bounty on his head. There is strong evidence that he controls a group of companies that are now arguably the dominant players in Myanmar's jade industry. Companies run by Wei Hsueh Kang and other UWSA/UWSP-related figures have been heavyweights in the jade business since the 1990s. The introduction of US sanctions forced a shuffling of the pack in the mid-2000s, but Global Witness investigations have identified five firms we believe are now the front for Wei Hsueh Kang's jade ventures. These companies recorded pre-tax sales of US\$100 million across the 2013 and 2014 government gems emporiums.

The extensive involvement of this range of individuals and organisations in the jade trade should sound alarm bells for all those with a stake in building a peaceful and prosperous future for Myanmar. These are not just political concerns, either. The secrecy and abuse at play in the jade

sector can also pose major problems for global businesses operating in the country.

For example, the Coca-Cola Company and Caterpillar Inc. have both recently been caught out as new information on their in-country partners and associates has come to light. Despite a seven figure due diligence process, Coca-Cola failed to identify their local partner's interests in the jade industry, including a long-running association with army company Myanma Economic Holdings Limited. The drinks giant stated in a letter that "The Coca-Cola Company has been transparent about our joint venture and operations in Myanmar and we continue to go above and beyond the Department of State's Reporting Requirements on Responsible Investment in Burma." Caterpillar, meanwhile, has hosted in at least five countries the front man for a group of jade companies Global Witness believes to be controlled by drug lord Wei Hsueh Kang. In a response to questions the company said that its due diligence had not demonstrated that the companies named by Global Witness are owned or controlled by "a sanctioned party".



Caterpillar Inc. is one of the many international machinery suppliers providing equipment for Hpakan's massive mining operations. Global Witness research reveals that its local dealership is linked to a group of companies which appears to be controlled by US-sanctioned narcotics kingpin Wei Hsueh Kang.



Stone marker on a bridge on the road to Hpakan, stating that it was built by jade mining firm Xie Family and US-sanctioned army company Myanma Economic Holdings Limited (MEHL). Coca Cola's due diligence checks failed to pick up their local director's stake in Xie Family, or the jade company's long-running business relationship with MEHL.

## Jade and armed conflict

Jade is inextricably linked to the conflict in Kachin State. Watching licensed companies controlled by their worst enemies gobble up their natural inheritance is a source of simmering resentment amongst the Kachin people. As some put it, "the tree is in our garden, but we are not allowed to eat the fruit". Such perceptions are deep-rooted and an important part of the nationalist narrative that drives Kachins to distrust or actively resist central government control. The relationship between jade and conflict matters for at least three other reasons:

- The army families and companies that own many of the jade mines would lose out in an equitable peace deal. They have the financial incentive and possibly the political reach to keep the conflict going until long-term central government control over Hpakant can be assured.
- The Tatmadaw officers in Kachin State are making

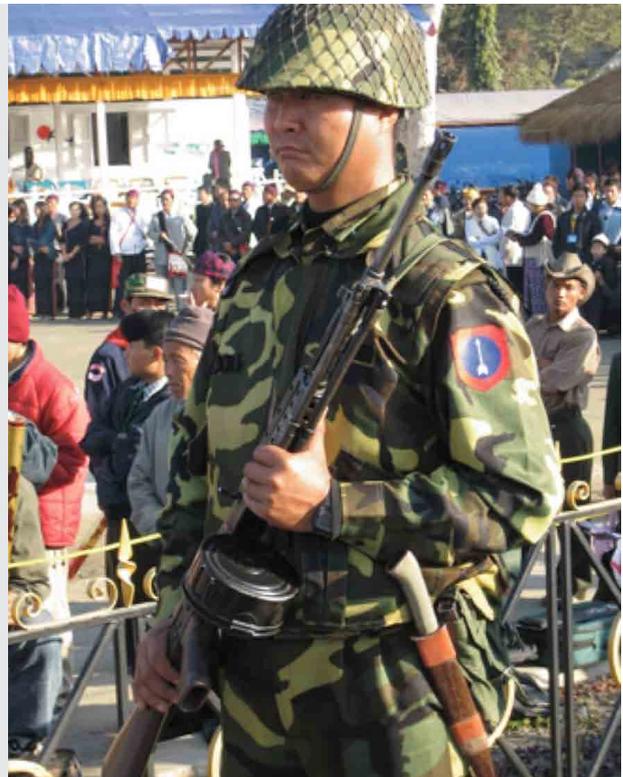
personal fortunes through extortion of the jade business, and so have a reason to justify their deployment and keep the money flowing.

- Jade is the main source of income for the KIA/KIO. This makes the battle for control of jade revenues a strategic priority for both sides in the conflict.

*"All of this is a reason for the conflict. And it will happen into the future too because the government knows Hpakant is the biggest jade mining area in the world. Local people see jade but they get no benefit."*

Jade company owner

It is very unlikely that a peace agreement that does not meaningfully address the question of who manages and benefits from Kachin State's jade will be a lasting one.



Locals' sense of injustice over their systematic exclusion from the jade sector feeds into the Kachin State conflict, as does the fact that both the KIA/KIO and the Tatmadaw (government army) see control of jade as a strategic priority.

## Opportunities for reform and the role of Myanmar's international partners

International partner governments have invested heavily in supporting the reform process in Myanmar. This is the right thing to do, but donors need to make sure their efforts deliver results for Myanmar's people as well as warm relations with its leaders. Reform of the jade business is one of the issues that they should use as a benchmark for future aid disbursements. To date jade has not figured in the dialogue between Nay Pyi Taw and its new friends – this is a gaping blind spot which must be addressed.

In 2014 President Obama claimed that "if Burma succeeds, we will have gained a new partner without having fired a shot". Certainly the approach taken by the US government will be pivotal. In practice, the US is the ultimate international arbiter on Myanmar's political transition and both Washington and Nay Pyi Taw governments know it. US diplomats have spoken up strongly for ethnic minority rights, and have sought to play a constructive role in resolving the conflict in

Kachin State. It is critical that they focus on what is happening in the jade sector.

The US and other donors have three main channels of influence to the jade sector: EITI, peace negotiations, and sanctions.

*"Jade is the least transparent business in the world."*

Local community leader, Kachin State

## EITI

Under President Thein Sein, the Myanmar government has taken the important step of signing up to the Extractive Industries Transparency Initiative (EITI), an internationally recognised framework for opening up the oil, gas and mining businesses. The US, UK, Norway, Australia and EU countries have all strongly supported this move. How EITI is implemented in the jade sector will be a key test of the government's commitment to reform.



The EITI could bring much-needed transparency to the country's most valuable extractive industry, if the government implements its standards effectively. But locals have questioned whether the government is willing to live up to its promises when it comes to jade.

The EITI could allow the public to see which companies are being given access to jade concessions and who these companies are ultimately owned and controlled by. It could also reveal the amounts of jade being produced and the government take of jade revenues derived both from tax and royalty receipts and through arrangements with state-owned enterprises. The publication of such data, combined with requirements to protect civil society space, could allow local groups to hold companies and officials to account for corruption or financial mismanagement.

*"That's why the government won't invite representatives of the jade business to join this discussion [about EITI] because they are afraid that all the corruption and misery will come out and the world will see."*

Jade industry representative



The companies licensed by Myanmar's government to mine jade make billions of dollars, both through official sales at this government gems emporium and through smuggling direct to China. Even basic information on who these companies are and where jade revenues are really going is kept under wraps, however.

Conversely, if the scheme's principles are not applied to the jade business as a matter of urgency, the opportunity would be lost and EITI's credibility in Myanmar severely damaged. There are signs of positive movement, and from some unexpected quarters. Some government officials have begun to show a commendable willingness to make the sector more open, sharing data on policies, practices and, most significantly, which companies control which mines. This is an important first step towards the EITI goal of publication of the identities of the individuals who ultimately control jade and other extractive companies.

Some of the big companies, too, have provided data that needs to be released under EITI. A surprising early champion of transparency is Htoo Group, owned by Myanmar's most famous crony tycoon, Tay Za, which has made an early disclosure of data on its jade mining businesses,

detailing its sales revenues and the taxes it has paid in respect of each of its jade concessions, in line with EITI standards. Another major jade mining player, the Ruby Dragon Group, has disclosed limited information on its ownership, including the names and national identification numbers of its shareholders; details which allow the backgrounds of these individuals to be checked.

These chinks of light show that there is nothing to stop jade companies in Myanmar from being more transparent, as long as they have necessary support and incentives to do it. In the coming months Myanmar will publish its first EITI report, and the government has the chance to show that it is serious about reform by making public key data on jade licence terms, licence holder identities, production levels and revenues received. The US and other donors, including the World Bank and the UK, should use their influence to help support this outcome.

## Peace negotiations

Another key potential opening concerns the peace negotiations between the central government and the KIA/KIO. As with EITI, the US and other western governments are heavily invested in this process. Given the current situation and the history of jade and armed conflict in Kachin, the government and its partners need to recognise the reality that a peace deal that once again avoids this question will not last.

To his credit, the minister overseeing peace talks, Aung Min, has publicly highlighted the need for wealth sharing to resolve armed conflict in Myanmar. To date, however, there has been no meaningful discussion of what this would mean in the Kachin context.

While the onus is on the government and the KIA/ KIO to take the initiative, it is crucial that local voices can feed into this debate. Kachin civil society organisations have already begun developing ideas

on what future natural resource management policies might look like, and an excerpt from a recent proposal by the Kachin Development Networking Group is included as an appendix to this report. Both sides in the conflict should urgently build on these foundations by consulting with a diverse range of civil society groups across Kachin State, and beginning a dialogue on a new model of shared ownership, management and revenue distribution for jade.

*“A ‘bottom to up’ development process engages local people in decision making and provides benefits to the local citizens. If people are not engaged in the process of managing their own natural resources, more political problems will emerge and peace in the country may be affected.”*

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In November 2014 around 2,000 people in the jade town of Hpakant staged a protest against abuses by the government-licensed mining companies. Some demanded that all company operations be suspended until the conflict in Kachin State is resolved. CREDIT: KDNG

## US sanctions

Both the peace process and the EITI are magnets for western donor funding. This brings with it excellent opportunities for donors to push for substantive change, but also risks of them ducking difficult issues that get in the way of the positive narrative of Myanmar's transition that some western capitals want to broadcast. Both the Kachin conflict and jade are difficult issues. Neither can be dodged or deferred.

The US also has the unique leverage of sanctions. Its JADE Act, which prohibits the import of jade, was originally designed to stop members of "the Burmese [Than Shwe] regime and its supporters [financing] their ongoing violations of human rights, undemocratic policies and military activities". Our investigation shows that some of these same people remain the main beneficiaries of the jade business. The US Treasury also has sanctions on 'crony' tycoons as well as sanctions targeting drug lords. Again, both groups are well represented at jade's top table.

Global Witness does not believe that all of these sanctions should be maintained forever. But neither should they be discarded too hastily; nor treated as a giant 'on/off' switch whereby stringent measures suddenly give way to no safeguards at all. As the US government knows well, from its experience in Liberia for example, a process of measured, incremental lifting of sanctions in post-conflict countries can provide one of the best guarantees of meaningful reform of natural resource industries that are enmeshed with armed violence and corruption.

The opportunity is there for the US, other governments and international donors and their reformist partners in the Myanmar government to agree a set of measures and milestones by which, as the jade industry becomes more open, and the benefits are shared far more equitably, the sanctions are progressively scaled back. Some suggestions on what these specific measures should include are set out in the recommendations section below.



It is yet to be seen whether Myanmar will become a foreign policy success for President Obama's administration, but if the US uses its influence to support a more transparent and fair approach to jade this could make an important contribution to development and prospects for peace.



Myanmar's international partners have the opportunity to support reform of the country's most valuable natural resource industry so that it benefits local people and supports sustainable development. CREDIT: Minzayar

## Recommendations

### To the Government of the Republic of the Union of Myanmar:

- Develop new ownership, management and revenue sharing arrangements with Kachin State for jade and other natural resources in conjunction with the KIA/KIO and local civil society groups, as part of a comprehensive peace agreement. Ensure that these arrangements maximise the social and economic benefits for the local and national population, taking account of the needs of both current and future generations.
- Prioritise full implementation of EITI in the jade sector. As such, publish data on: jade licence bidding processes; who current licence-holders are and what licences they hold; jade production volumes; government revenues from jade concessions (broken down by project); other revenues from jade, including revenues from government shares of state-owned enterprises; full contract and licence terms (including environmental and social protections); and arrangements with state-owned enterprises.
- In line with EITI recommendations, require jade concession holders and companies bidding for concessions to disclose publicly the identities of the individuals by whom they are ultimately owned and/or controlled (the 'ultimate beneficial owners'). In addition require disclosure of any associations with public office holders (past or present), and any past record of corruption or environmental or human rights abuse together with details of measures taken to address such issues.
- Make the above EITI provisions on data disclosure a requirement of new mining, gemstone and other laws governing the jade business.

- Immediately review and revise bidding processes for jade concessions in consultation with Kachin and Myanmar civil society to make them open and fair. This should include introducing explicit protections against conflicts of interest and corruption which take account of the identities and histories of bidders.<sup>ii</sup>
  - Reinstate the company shareholder details in Myanmar's company registry, and publish additional information on the ultimate beneficial ownership of companies.
  - Require the accounts of state-owned enterprises (including entities that are partly or wholly owned by the army) to be independently audited and details of all jade revenue receipts and transfers to the government to be published.
  - Publish a detailed breakdown of government expenditure so as to allow local people to track where jade money ends up.
  - Review and revise existing laws to bring them into compliance with the EITI Civil Society Protocol and to ensure that civil society and the media are free to hold the government and companies to account over jade sector management and operations without fear of physical, legal, or other forms of retribution.
  - Simplify and clarify taxes on jade, with input from the private sector, local government and civil society and strengthen revenue collection systems to reduce tax evasion, particularly at the mine site.
  - Investigate jade-related corruption involving army, police, government officials and companies; prosecute perpetrators and hold to account those with command responsibility.
  - Cancel any jade mining licences obtained through corruption or held by companies that have broken the law or contributed to human rights or environmental abuses.
  - Review and revise laws, regulations, policies governing the jade sector, and the terms of licences and contracts for jade concessions
- to ensure they include environmental and social protections in line with international standards including: the UN Human Rights Council's Guiding Principles for Business and Human Rights; the Voluntary Principles on Security and Human Rights; the International Finance Corporation's Sustainability Framework; and the International Council on Mining and Metals' Sustainable Development Principles. Amongst other measures, a grievance redress mechanism should be established, in a form agreed after public consultation within Kachin State, with effective penalties for companies which fail to comply with environmental and social protection requirements.
- Establish an independent monitor to ensure that environmental and social protections are implemented promptly and fully, with regular public reports on breaches identified and how they are being addressed.
  - Pass legislation that prohibits the military, police and other security services, and their individual serving officers, from establishing, operating, or exercising beneficial ownership over companies.
- .....
- To all donor governments, international financial institutions, and other partners of the Myanmar government:**
- Make funding and other forms of support to the Myanmar government and (in the case of the US) the lifting of sanctions conditional on delivery of the above reforms.
  - Provide technical support to the government's efforts to implement EITI, particularly with reference to reforms of the jade sector, and to efforts to incorporate EITI principles into laws on natural resource management.
  - Provide technical support to the government, KIA/KIO and Kachin civil society's development

ii For detailed recommendations on preventing corruption in the award of oil, gas and mining licences, see the 'Citizens' Checklist' set out in Global Witness, 'Rigged', January 2012; available at <https://www.globalwitness.org/reports/rigged/>.

of new ownership, management and revenue sharing arrangements for the management of jade and other natural resources as part of a comprehensive peace agreement.

- Support, financially and politically, civil society organisations in Kachin State and across Myanmar that are working to increase accountability in the management of natural resources.

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### To the KIA/KIO:

- Publish data on management of the jade sector by KIA/KIO authorities, in line with EITI, including details of the KIA/KIO taxation regime, expenditure and oversight.
- Draw up policy proposals for how Kachin State would manage the jade sector under a federal system, with input from a diverse range of civil society groups in Kachin State.
- Investigate jade-related corruption involving KIA/KIO officers and officials, prosecute perpetrators and hold to account those with command responsibility.

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### To jade mining and trading companies:

- Disclose data in line with EITI requirements. This includes: tax and other payments to government from jade concession holders (broken down by project); names and identifying information (including national identification numbers) of the individuals who own and/or control them; and jade contract and licence

terms (including any environmental or social provisions). State-owned enterprises, including army companies, should disclose their stakes in jade mining and trading ventures and transfers of money to other branches of government in line with EITI.

- Immediately review existing mining operations and halt activities that breach national or international laws and standards on environmental, social, human rights and worker rights.
- Establish and implement policies and procedures to minimise and mitigate environmental, social and human rights impacts of jade mining operations, in line with international standards including: the UN Human Rights Council's Guiding Principles for Business and Human Rights; the Voluntary Principles on Security and Human Rights; the International Finance Corporation's Sustainability Framework; and the International Council on Mining and Metals' Sustainable Development Principles.

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### To current or prospective international investors in Myanmar:

- Carry out rigorous due diligence on existing or prospective local partners particularly those with potential connections to the gemstone sector.
- Publish the names and national identity numbers of all individuals who own and/or control stakes in local ventures, together with background information on these individuals.

## METHODOLOGY AND REPORT STRUCTURE

Global Witness carried out the research and analysis on which this report is based between February 2014 and September 2015.

We gathered information through meetings and correspondence with over 400 public officials, industry representatives and community members across Kachin State, Yangon, Nay Pyi Taw and Mandalay in Myanmar, and various locations in China.

Amongst others in Myanmar, Global Witness has met with and/or exchanged correspondence with:

- The Ministry to the President's Office.
- The Directorate of Investment and Company Administration (DICA) which is responsible for the country's company registry.
- The Myanmar Gems and Jewellery Entrepreneurs Association, the industry body which represents jade companies in Myanmar.
- Army companies Myanma Economic Holdings Limited and Myanmar Economic Corporation.
- Leading private companies including the Htoo Group, KBZ, Max Myanmar, the Ruby Dragon Group, the Ever Winner group, Myanmar Takaung, Xie Family and Gold Uni.
- Multinationals the Coca-Cola Company and Caterpillar Inc., and a representative of another major machine company.
- The Kachin Independence Army / Kachin Independence Organisation.
- Members of the upper and lower houses of Myanmar's parliament.
- Jade company staff, independent jade traders, carriers and 'hand-pickers'.

In addition, we have interviewed a range of jade traders and industry representatives in China.

Given the sensitivity of the issues, we do not reveal the identities of most interviewees in this report, and the references to meetings with them in the endnotes have been coded.

### *Data analysis:*

Global Witness has reviewed, analysed and used a wide range of data sets for this report including:

- Ministry of Mines data on jade licence holders, including detailed jade concession maps for the Hpakant area. These maps are reproduced in Chapter 1 of this report.
- Company records made available in DICA's online company registry at <http://dica.gov.mm.x-aas.net/>. In 2014, data including the names, identification numbers and addresses of directors and the names of shareholders for all Myanmar companies was published through this website. This information had been taken down by the end of 2014, and it was subsequently partially reinstated in mid-2015. However, OpenCorporates, the world's largest open database of companies, has collected and published the records made available in 2014. The Open Knowledge Foundation and OpenCorporates supported Global Witness in analysing these records.
- Various detailed breakdowns of sales at the 50th, 51st and 52nd gems emporiums (geared towards foreign buyers) which were held, respectively, in 2013, 2014 and 2015. Alongside this we reviewed summary data on jade sales at the emporiums held between 2002 and 2012, and two emporiums open only to Myanmar traders that were held in January and October 2014. Analysing this information, alongside official production data, Chinese import statistics and industry estimates of the informal sector, Global Witness has produced new estimates for the value of Myanmar's jade industry and total sales figures for key players in the business. Details of these calculations are set out in Appendix 1 of this report.
- The Htoo Group has also provided details of each of the jade blocks it holds, together with

levels of production and the associated sales and tax figures for each of these blocks. This project level data has fed into Global Witness' economic analysis of the jade industry.

- Information gathered by the Kachin Development Networking Group on the social and environmental impacts of jade mining in Kachin State. We have used this data alongside Global Witness interviews carried out across Myitkyina, Hpakant and the surrounding areas to build up a picture of the effect the industry is having on inhabitants of Kachin State.

*Report structure:*

This report sets out the main findings of Global Witness' investigations into the jade sector, divided into four chapters:

- Chapter 1: 'What is it Worth and How Does it Work?': This sets out Global Witness' estimates of the value of Myanmar's jade sector, and briefly explains how jade licences are awarded and how the stone is mined and traded – as well as the corruption and mismanagement at different stages of the process.
- Chapter 2: 'Who's Benefitting?': This identifies the powerful individuals behind some of the biggest government-licensed players in the jade industry. This section is separated into four sub-categories representing the four types of companies Global Witness has identified as reaping the greatest benefits: companies owned by army families; army companies; 'crony' companies'; and ceasefire group companies.
- Chapter 3: 'Who's Losing Out?': This section considers the impact the government's current approach to jade mining is having on the inhabitants of Kachin State, both ethnic Kachin and members of other ethnic groups such as the Shan, Bamar and Rakhine, all of whom are suffering devastating social and environmental impacts.
- Chapter 4: 'Jade and Armed Conflict': This section reviews the linkages between the jade industry and the long-running armed conflict between the Myanmar government and the Kachin Independence Army / Kachin Independence Organisation.

## CHAPTER 1: WHAT'S IT WORTH AND HOW DOES IT WORK?

*"How come we are LDC [Least Developed Country]? A country so rich in oil, gas and gems should not be an LDC. For the answer you need to look at the military. The country is being stripped of all its resources. We shouldn't be that poor. No way! The key issue is transparency!"*

Former official<sup>1</sup>

### Introduction<sup>iii</sup>

Hpakant in Myanmar's northern Kachin State holds the world's most valuable jade deposits. However, our investigations reveal that the government system for allocating and managing jade mines is fraught with corruption, allowing a powerful elite to cream off most of the profits. Little, if any, of the vast sums generated are spent on the infrastructure, health and education that the people of Kachin State and Myanmar as a whole deserve.



For over 250 years, the Kachin Hills have been famed as the home of the biggest and most valuable jade mines in the world. Of the many colours and varieties of jade which can be mined, the most highly prized is always imperial green jadeite from Myanmar; prices for flawless stones can approach those of diamonds. CREDIT: Adam Dean

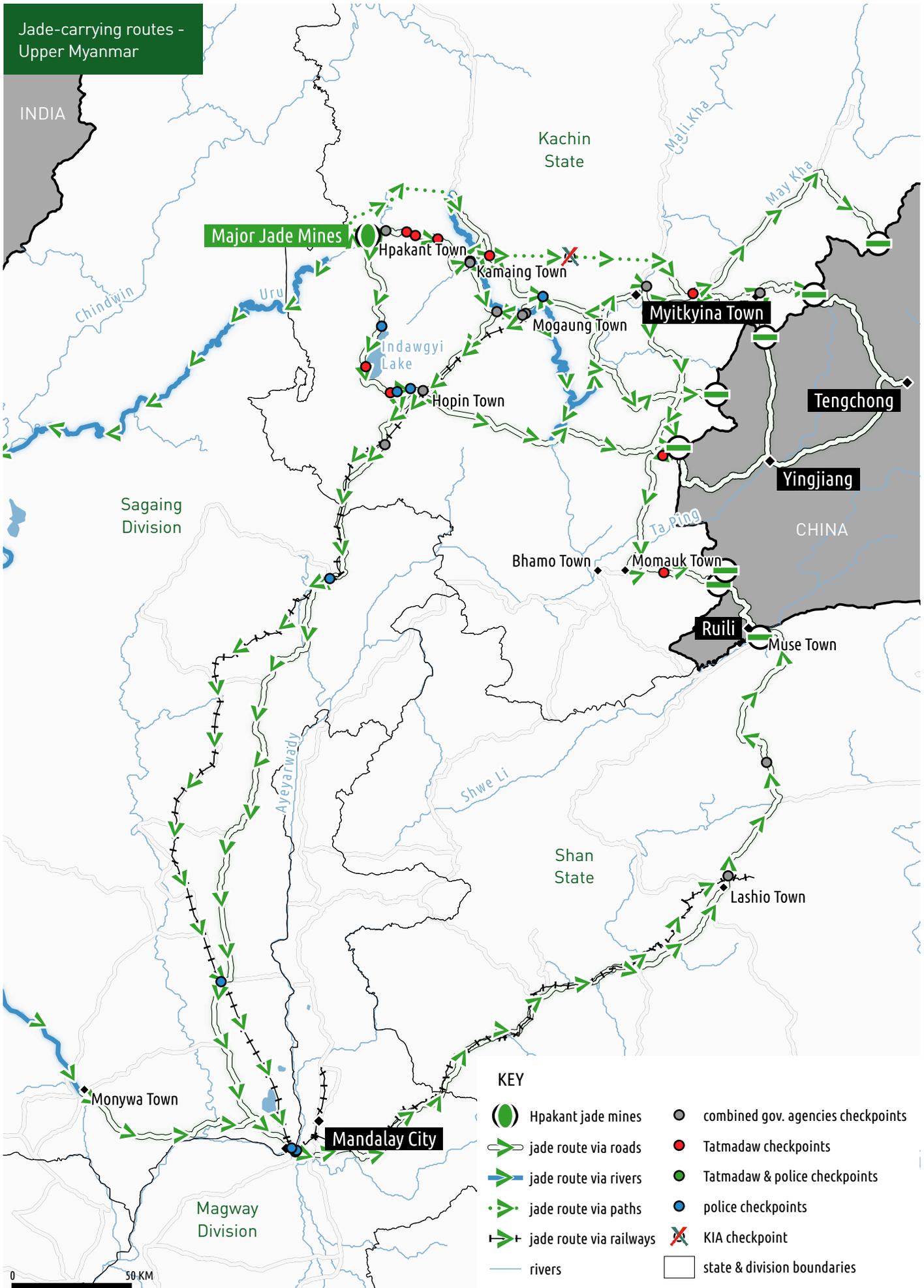
With the possibility of both a new government and a peace agreement with the KIA/KIO around the corner, licensed companies are ramping up their mining operations, using massive machines to extract all the jade they can now, in case a change in the political climate leaves them out in the cold.

### The multi-billion dollar state secret

Described as Myanmar's "big state secret", even basic information on the jade industry has long been kept under wraps.<sup>2</sup>

Chinese government import data for 2014 indicates that the category of gemstone imports from Myanmar that covers – and overwhelmingly comprises – jade was worth US\$12.3 billion.<sup>3</sup> This is an astonishing sum. However, as explained below, numerous industry sources have told Global Witness that 50%-80% of jade is smuggled straight over the Myanmar-China border, [see next page for map of smuggling routes used]. Chinese customs data supports these claims, showing that less than a third of Myanmar's official jade production entered China legally, even though China is where almost all Myanmar's jade ends up.<sup>4</sup> This suggests that the US\$12.3 billion figure, huge though it is, significantly underestimates the true value of Myanmar's jade production.

<sup>iii</sup> 'Jade' is a generic term for two distinct gemstones: jadeite and nephrite. Jadeite is rarer and more valuable than nephrite. Myanmar is the world's dominant supplier of jadeite, and it produces the highest quality stones. The specific gemstone referred to in this report is jadeite, but we use the term jade throughout the text.



Global Witness has therefore undertaken a new and in-depth analysis of the value of the jade business that draws on a range of unpublished data. Our estimates put the value of Myanmar's official jade production in 2014 alone as high as US\$31 billion, and up to US\$122.8 billion over the last decade (2005 to 2014). To put this in perspective, US\$31 billion equates to 48% of Myanmar's entire official GDP.<sup>5</sup> This breaks down to at least US\$21,000 per person in Kachin State where jade is mined and up to 46 times the country's total health expenditure for 2014-15.<sup>6</sup>

How can these figures be so high and how are they calculated?

Good quality jade is extraordinarily valuable and Myanmar is the world's main source. The 2014 Myanmar Gems Emporium – the primary official government jade sale which is geared towards international buyers – featured jade that sold for as much as US\$2.89 million per kilogram. For the very best stones, values can approach those of diamonds, carat for carat.<sup>7</sup>

Our calculations are described in detail in Appendix 1 to this report. In summary, they take Myanmar government jade production data and combine it with price data derived from a detailed breakdown of sales from the 2014 Myanmar Gems Emporium. They also factor in aggregated sales figures from an October 2014 jade fair for low grade stones for the domestic market, together with data from the 2013 Myanmar Gems Emporium and emporiums held in previous years.

Rampant smuggling means that the Myanmar Gems Emporium sales figures significantly understate the percentage of highest value

'imperial' and medium value 'commercial' grade jade as a share of overall jade production. We have therefore used the estimate of the respective percentages of imperial, commercial and utility (low) grade jade employed by Harvard Ash Center and Proximity Designs in their 2013 assessment of the business.<sup>8</sup> This estimate is based on interviews with industry leaders.

The opacity of Myanmar's jade business means that available data is incomplete and any valuation involves choosing between different methodologies and assumptions. It is therefore worth highlighting that another, completely different method of assessing 2014 jade production also yields an estimate of well over US\$30 billion. If one calculates the average price per kilogram of jade imports as indicated by the Chinese government in 2014 and combines it with Myanmar government production figures for the same year, this suggests a value of almost US\$38 billion.

Finally, since all our estimates are based on official production data, they take no account of the significant portion of jade output which is kept entirely off the books and never recorded by the Myanmar authorities at the mines. Consequently, our calculations may significantly understate the real value of Myanmar's total jade production.

All of these estimates are just that – estimates. Our intention, in publishing some specific figures, based on the incomplete data available, is not so much to have the last word on the value of Myanmar's jade business as to trigger a debate and encourage the full disclosure of the information the public needs to make more definitive assessments on an ongoing basis.



The mines in the Maw Sizar area of Hpakant are famed for the high quality jade they produce. For the most sought after mines, bidders depend on high-level connections and bribery to secure official licences. CREDIT: Minzayar

## What is the State's take of Myanmar's jade billions? And, where does the money go?

*"The government wants to keep [jade data] secret because, if published, the whole world would know that the locals get no benefits... and how much mining tax the government should get. They don't want the world to see."*

Jade businessman<sup>9</sup>

Jade businesses are required to pay a range of fees, royalties and taxes to the Myanmar government. These include licence and administrative fees, a 20% value-based tax on jade at the mine site, a 10% tax on emporium sales, and standard business taxes including a commercial tax.<sup>10</sup> In addition, Myanmar's state-owned enterprises the Myanmar Gems Enterprise (MGE) and army companies like Myanma Economic Holdings Limited have stakes in the majority of large jade mines and receive 40% of post-tax sales revenues from each of them.<sup>11</sup> Theoretically, therefore, the lion's share of jade revenues should end up in state coffers.

Based on the limited government data available, however, Global Witness estimates that the state may have received less than US\$374 million in official jade revenues in 2014; under 2% of our production estimate of US\$31 billion.<sup>12</sup> Without detailed data on Myanmar's budget and expenditure, it is impossible to track exactly what the government does with the jade money it receives – and how much is spent on much-needed development of Kachin State and the country more broadly. What is clear, however, is that Myanmar's military is a significant beneficiary of the revenues from jade.

The Ministry of Defence receives a direct cut of state revenues through its 12% share of the national budget, and army companies such as Myanma Economic Holdings Limited hold stakes in various jade mining operations.<sup>13</sup> More significantly, as Chapter 2 shows, the families of retired army generals stand behind some of the jade industry's biggest players, giving them access to a major revenue stream which has, until now, been kept in the dark.

*"Taxes and revenues on the use of natural resources must be collected by a democratically elected Kachin State government and the process clearly and transparently explained to the residents of the state."*

KDNG / Kachin State Natural Resources Development Policy Discussion Paper

So far internationally-supported reform efforts have focused on Myanmar's petroleum industry. Natural gas, which generated export revenues of US\$4.2 billion in 2014, is seen as the key driver of the country's economy.<sup>14</sup> Jade dwarfs gas, however. It should be the focus of efforts to combat corruption and channel extractive industry benefits to those in most need, rather than an afterthought.

Real reform could see the benefits of jade re-directed towards much-needed development. Myanmar has one of the lowest life expectancies in the region, and the people of Kachin State suffer acutely from the impacts of a decades-long conflict.<sup>15</sup> A single kilogram of the highest priced jade sold at the 2014 emporium would have generated enough revenue to fund 147 health clinics in Kachin State for one year.<sup>16</sup>

## EITI: Window-dressing or game-changer?

*“Jade companies won’t publish any clear information on the business and they certainly won’t announce it internationally. That’s why the government won’t invite representatives of the jade business to join this discussion [about EITI] because they are afraid that all the corruption and misery will come out and the world will see.”*

Jade businessman<sup>17</sup>

Under President Thein Sein, Myanmar has committed to tackling the secrecy and opacity which has dogged its natural resource industries for so many years. In July 2014, the country became a candidate member of the Extractive Industries Transparency Initiative (EITI), a global standard for governance of the oil, gas and mining sectors.<sup>18</sup>

The EITI sets out requirements and recommendations for the publication of extractive industry data. These include: production volumes; information on licence allocation processes; concession licence and contract terms; the identities of individuals behind companies which bid for, operate or invest in oil, gas and mining projects; payments to the government from extractive companies (including state-owned enterprises); and government receipts from such companies.<sup>19</sup> EITI also requires that civil society has the freedom to express views on issues relating to natural resource governance.<sup>20</sup>

*“For limited protection mechanisms such as EITI to work properly, there must be freedom of movement and information. These freedoms are currently not guaranteed as there is continued harassment and intimidation of media, CSOs and local people by central authority structures such as the military, police and government officers.”*

KDNG/Kachin State Natural Resources Development Policy Discussion Paper

The impact EITI has varies tremendously from country to country depending on the level of commitment of the government concerned. The Liberian government, for example, has incorporated not only the EITI provisions into national law but also additional anti-corruption measures.<sup>21</sup> By contrast, in Azerbaijan the implementation of the EITI has failed to tackle corruption in the country’s oil industry and the government has imposed restrictions on civil society organisations’ ability to hold public officials and extractive companies to account.<sup>22</sup>

Some Myanmar government officials are demonstrating real commitment to greater transparency. During the course of the research for this report, both the Ministry of Mines and its state-owned enterprise, Myanmar Gems Enterprise (MGE), have provided assistance and information on the jade industry to Global Witness. There is also growing awareness of EITI amongst companies. Two of the prominent jade businesses profiled in Chapter 2, Htoo Group and Ruby Dragon, have already started disclosing data on their operations to Global Witness.<sup>23</sup>

This is a promising start, but the real test will be Myanmar’s first EITI report which is due to be published in the next few months. The extent to which this makes data on jade available to local people will be a critical marker of whether Myanmar’s EITI is a credible reform process or an empty promise.<sup>24</sup>

## Slicing up the jade pie

In Myanmar the established narrative holds that jade is produced in a remote, conflict-riven corner of the country which it is not possible for the government to administer or regulate. The conflict element of this is true (see Chapter 4) – the rest is not. In reality, the Nay Pyi Taw authorities have full control of the major jade mines in the Hpakant area. They decide who has access to valuable concessions and on what basis.

Evidence collected by Global Witness strongly suggests that the licensing process is weighted heavily in favour of a powerful elite connected or allied to the ruling Union Solidarity and Development Party (USDP) and the military, who use networks of anonymous companies and proxies to disguise their identities. The notion of Kachin State being ungovernable allows this elite to perpetuate the idea that applying transparency reforms such as EITI to the jade business is not possible. This sustains the secretive, abusive and highly lucrative status quo.

## Awarding jade licences: the official account

According to the Ministry of Mines' gemstone division, MGE, the jade mining area in Hpakant amounts to nearly 35,000 acres, although it appears that not all of this is actually mined.<sup>25</sup> The value of deposits varies considerably depending on the grade and type of stone they hold, and changes in fashion and consumer demand for different colours and varieties of jade.<sup>26</sup> Certain mining sites such as Maw Sizar, Kawng San, Kayin Chaung, Nam Maw and Gwi Hka are widely reputed to hold the most valuable deposits, and are therefore particularly sought after.<sup>27</sup>

Concession areas are either known mines which the Ministry of Mines has demarcated or mines which have been discovered by a party who has then sought permission to explore from the Ministry of Mines.<sup>28</sup> For known mines, the government will

publish invitations to tender in the newspapers and interested companies will register at the Myanmar Investment Commission.<sup>29</sup> They then have a month during which they can study maps at MGE and make site visits before submitting a bid.<sup>30</sup> Where a mine has been newly discovered, the site will be inspected and if MGE then decides to award it to the applicant, a signature bonus will be payable.<sup>31</sup> Licences are awarded for three or five year periods but can be extended by up to ten years.<sup>32</sup>

Companies can hold jade concessions in three forms:

- Under the '*a kyo thu*' system, whereby they have a profit-sharing arrangement with the Ministry of Mines' state-owned enterprise MGE. Private companies take 60% of post-tax revenues and the government takes 40%.<sup>33</sup> There are various advantages to an *a kyo thu* licence, including bigger block sizes (up to 50 acres), longer licence periods and easier extension processes than are allowed for 'private' licences. According to an industry representative, companies which enter into a *kyo thu* arrangement are not required to pay a licence fee.<sup>34</sup> However, it remains the sole responsibility of the private partner to undertake the mining operations and cover costs.<sup>35</sup>
- As entirely private concessions under which the companies take all post-tax sales revenues. 'Private' permits are awarded for one-acre blocks, and these can be 'designated' or 'discovered' licences. Companies can apply for multiple licences up to a limit of 50 acres per company.<sup>36</sup> There does not, however, appear to be any obstacle to an individual setting up several companies to avoid this limit.
- In partnership with an army company such as Myanma Economic Holdings Limited (MEHL). These are classified as 'private' licences, but revenues are shared between the private partner and the army company. The share split is kept secret, but industry figures say that the army company commonly takes a

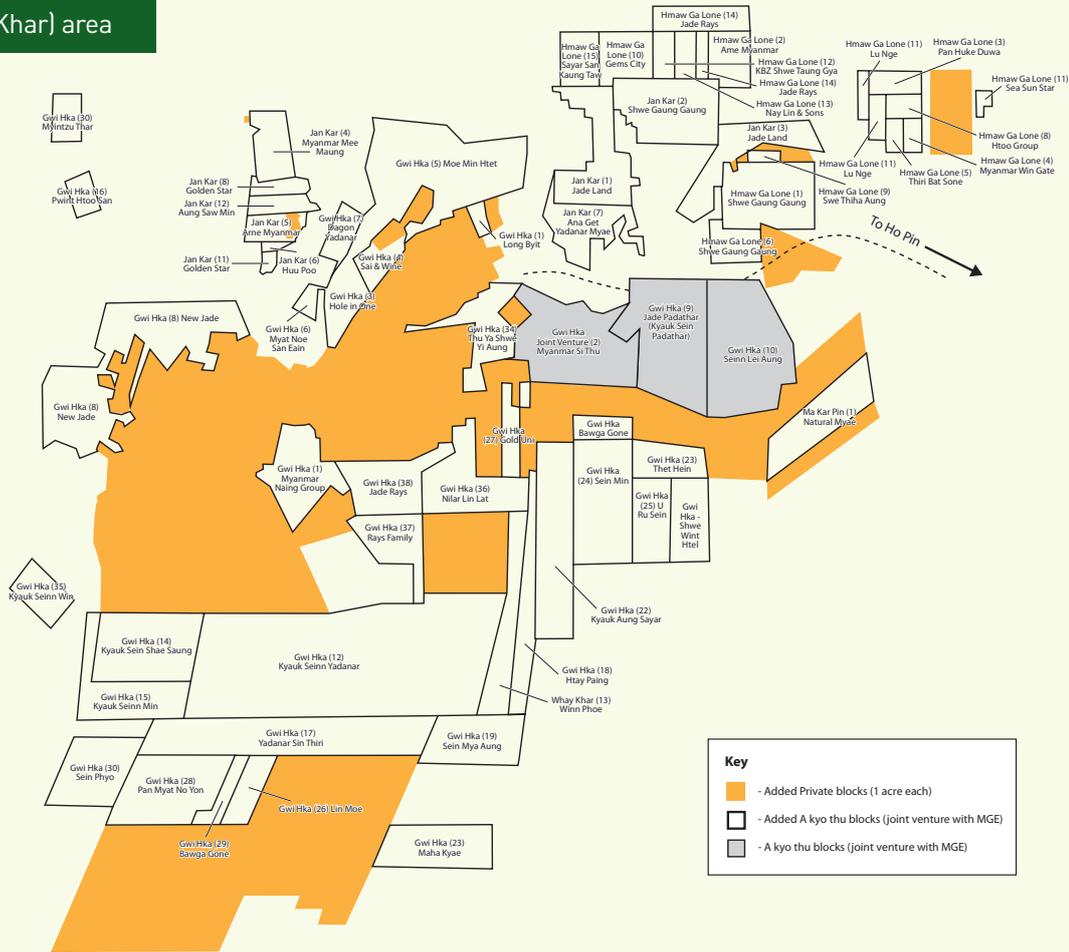
40% post-tax share.<sup>37</sup> Both MGE and MEHL deny that the army company and its partnerships have a distinct or special status.<sup>38</sup> However, numerous accounts from industry sources indicate that military company joint ventures are effectively a parallel system.<sup>39</sup>

According to MGE, the minimum bid for a 'discovered' block is 500,000 kyat (roughly US\$500), and at least one million kyat (US\$1,000) for a 'designated' block.<sup>40</sup> Bids can, however, go up to 50 million kyat (US\$50,000).<sup>41</sup> The transfer of licences is strictly prohibited, so if a company wishes to relinquish a jade mine it is supposed to hand it back to the Ministry of Mines, rather than selling it or passing it on to any other party.<sup>42</sup>

Decisions on jade licence awards are made by a committee composed of the Minister, the Deputy

Minister and the Managing Directors of the Ministry of Mines, following a review of sealed bids and a consideration of the background of each bidder.<sup>43</sup> This decision is then approved by a "leading" cross-ministry committee comprising the Minister of Mines, the Deputy Minister of Mines, the Deputy Minister of Home Affairs, the Deputy Minister of Finance, the Deputy Minister of National Planning and Economic Development, the Deputy Attorney General, the Director General of the Directorate of Water Resources and Improvement of River Systems, the Director General of the Department of Forestry and the Director General of the Department of Mines.<sup>44</sup> Maps – never previously published – showing which companies hold official licences to major jade concession areas across Hpakant are shown below and on the following pages.

Jade mining concessions in Gwi Hka (Whay Khar) area



Key	
<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span>	- Added Private blocks (1 acre each)
<span style="display:inline-block; width:15px; height:15px; border:1px solid black;"></span>	- Added A kyo thu blocks (joint venture with MGE)
<span style="display:inline-block; width:15px; height:15px; background-color:grey; border:1px solid black;"></span>	- A kyo thu blocks (joint venture with MGE)

**Note:** In this and the following two maps we have, wherever possible, written the names of the companies in the same way that they are registered in DICA English language / Roman script records to make it easier to look up who these firms are. This introduces some inconsistencies in the way particular words and names are written.





## Big hats and bribes: how to get your own jade mine

Global Witness interviews with key players in the business suggest that, behind the scenes, high-level connections and bribery are needed to secure the most sought-after concessions. A former official explained that whilst the Minister of Mines does sit on the allocation committee, a more senior political figure is also involved and is, in practice, the real decision-maker.<sup>45</sup>

Multiple industry sources have described how the award system favours a powerful elite. One businessman explained that whilst there is no set policy on how licences are awarded, if an army figure is involved in the company that is making the bid, there is a 90% chance that they will get it.<sup>46</sup> A second businessman detailed how high quality jade deposits go to senior officials and their children and other relatives or well-connected businessmen, whilst deposits which yield lower quality stones go to less-connected players.<sup>47</sup> Another industry figure confirmed this, saying that companies without connections can apply for licences but are almost certain to be granted blocks which have only low-grade jade reserves.<sup>48</sup>

.....

*"If there is a big hat involved, surely they will get [the concession]!"*

Jade businessman<sup>49</sup>

*"If no relationship with the government, then no mining licence."*

Jade businessman<sup>50</sup>

*"All good quality jade belongs to the families of generals."*

Jade businessman<sup>51</sup>

*"Every cabinet minister is involved in jade – it's their best source of income, even though they have never been to Hpakant."*

Jade businessman<sup>52</sup>

.....

One businessman described a typical scenario, whereby a crony tycoon will approach a minister and say, "I really need to get this area in Hpakant to mine jade. Whatever it costs, I will do it." The Minister will then ensure that he gets the licence, in return for a cut of the profits.<sup>53</sup>

Both the *a kyo thu* and the army company partnership arrangements come in for criticism from people in the jade business and some of the challenges facing army company partners are described in the next chapter. Commenting on the *a kyo thu* system, one long-time jade businessman noted that:

*"Every a kyo thu company is related to military officers in uniform... in practice, [a kyo thu] means it's open to whoever is related to the ruling families. Even if you have money you cannot get into Hpakant without connections".<sup>54</sup>*

Those involved do not want outside scrutiny and they "fear transparency".<sup>55</sup> One businessman explained that if it appears that the connection of a military figure to a mining company may become known, the names associated with him will simply be removed from company records.<sup>56</sup> More generally, according to another industry representative:

*"Companies are aware of the risks of becoming too high profile – the government will pay more attention to them and the KIO will target them. So the strategy is to divide up their operations amongst small companies to disguise [them]."<sup>57</sup>*

This description was backed up by another businessman who explained that companies often set up "branches" in the names of their wives and sons so as to avoid becoming conspicuous by having one person or company holding a huge number of acres.<sup>58</sup>

Consequently, whilst there are around 100 big companies actually operating (out of 937 permit holders), industry sources suggest that they are controlled by only 10 or 15 owners. The mines are under the control of a few top names.<sup>59</sup>

## Greasing the jade wheel: corruption in practice

*"When you go to see high-ranking officials, you don't go empty handed."*

Former jade businessman<sup>60</sup>

Industry representatives have provided details of the system of pay-offs typically needed to obtain licences, particularly for the most valuable jade concessions.<sup>61</sup> They described various scenarios including the following:

- If you want a licence, there are several categories of bribes you may need to pay:
  - Firstly, you need to pay a bribe to get the land surveyed and measured in line with the Gemstone Law.
  - Secondly, you may need to bribe township officials, including the jade department, particularly for the more significant concessions.
  - Thirdly, you may need to bribe the Tatmadaw Northern Commander (the top army general in Kachin State), the Kachin State Chief Minister or officials in Nay Pyi Taw.<sup>62</sup>

*"All companies need one or two big hats"*

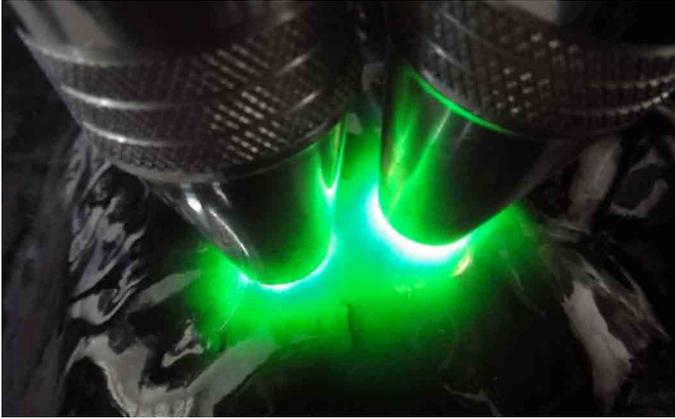
Jade businessman<sup>63</sup>

- If the concession is highly sought-after, you also need connections such as family ties or friendship with powerful figures. Such connections can also reduce the amount of money you need to put down as a deposit.<sup>64</sup>
- If you are a drug lord, for example, you can offer a payment to an army general for his assistance in securing a particular jade concession. If the licence comes through, this general or one of his family members will get a share in the mining company that is then set up to carry out operations.<sup>65</sup>
- If you are a company without a 'big hat', you can approach a company which has high-level connections to act as a broker for you. In this case, you would offer to pay the connected company to apply for a licence in its name, and then allow you to use that licence. Some companies that undertake this 'brokering' role "have never been to Hpakant; they just use their company name [to secure licences]".<sup>66</sup>
- If you are the son of a general who wants to take control of a certain jade mine, then you can team up with one of the big companies. They can create a new company with a new name and share ownership with you. These big companies can then repeat this process with the sons of other generals.<sup>67</sup>

## Playing the jade game: tax evasion, money-laundering, price-manipulation, underselling and smuggling

On paper, there are strict rules and regulations that govern Myanmar's jade trade. When stones are mined in Kachin State, they are required to be officially recorded and evaluated, and a 20% tax is

levied.<sup>68</sup> If companies then want to sell their jade legally to the Chinese buyers who constitute the major market for the stone, they transport it to Nay Pyi Taw where it can be sold at the government-organised Myanmar Gems Emporium which is currently held once a year. It is also possible to sell very low grade jade at occasional 'local' emporiums in Nay Pyi Taw that are aimed only at Myanmar merchants.<sup>69</sup> Another option is the market in Mandalay that generally caters to lower grade stones.<sup>70</sup>



'Windows' are cut into jade sold at the emporium so that buyers can assess the quality of the stone. Many sellers deliberately cut into lower quality sections of jade blocks to make them appear less valuable than they really are. They arrange for proxies to buy the stones for them, at an artificially low price, so that they pay less tax on the sale. They then export the jade to China and cut again, this time to show its most valuable sections so that it can be sold at a massive mark-up.

At big Myanmar Gems Emporium events, companies typically sell rough stones that are cut to display their quality.<sup>71</sup> Jade is either sold through a tender process whereby interested bidders submit sealed bids above a reserve price or, for the most valuable stones, through an auction.<sup>72</sup> Any jade sold is then subject to a 10% sales tax, after which it can be exported out of the country.<sup>73</sup>

In practice, however, these formal processes are widely circumvented. A common complaint of industry figures is that Myanmar's tax structure means that there is no money to be made in following the law and companies have to bypass taxation and official sales and smuggle their jade.<sup>74</sup> Moreover, there are no standard market rates for jade, and prices are extremely subjective, with demand for different colours and types fluctuating over time.<sup>75</sup> This makes it easier for companies to manipulate jade prices and escape paying duties on their jade sales.

People in the business describe a variety of tactics in use to cheat the system, including:

- **Tax evasion – at the mine site:** Jade is liable to a 20% of value tax when it is first mined, but Global Witness has received numerous accounts of companies paying off officials to reduce or avoid this tariff.<sup>76</sup> In the words of one jade company manager, "All of us, all the companies do this".<sup>77</sup> Others talk of substituting

low-value for high-value stones during the official valuations.<sup>78</sup> Such manoeuvres are generally a prelude to smuggling, as described below.<sup>79</sup> Our calculations, based on 2014 jade production and jade grade and price distributions at the 2014 emporium, indicate a discrepancy of up to US\$6 billion between what this tax could have generated in 2014 and what the government actually received. This could be due, in part, to legitimate reasons. We do not have data on the costs of transporting jade from Hpakant to Nay Pyi Taw, and therefore do not adjust the discrepancy for these costs. Similarly, we cannot estimate the degree to which cutting and polishing jade added to the value of some stones before they were sold at the emporium, so again we cannot adjust for this. It is also possible that companies may have chosen to hold part of the jade they mined as stock rather than selling it in Nay Pyi Taw. Given the size of the discrepancy, however, the likelihood is that a significant part is due to tax evasion.

- **Tax evasion – at the official sales:** If a company finds a valuable piece of jade, it may deliberately cut a window into a part of the stone which is of lower quality than the rest. This allows it to set a floor price for the jade at a fraction of its real value. Next, the company makes sure that its own agents or proxies secure the winning bid on the stone. Because the sales price is artificially deflated, the level of tax the company then has to pay is far lower than it should be. Once the (reduced) tax has been paid, the company can legally transport the stone to China. Here it cuts the stone again, this time in a way which displays the valuable part of the jade, and sells it at a much higher price. According to a prominent industry figure, approximately 60% of 2014 emporium sales involved vendors buying their own jade back and the top companies use this method for around 80% of the jade they sell.<sup>80</sup>
- **Market manipulation:** At the emporiums, buyers who have already stockpiled a certain kind of jade sometimes win bids on stones of the same type but then fail to pay for and collect them. This enables them to restrict supply and to command high prices for the jade they already have.<sup>81</sup>

- **Money laundering:** In some cases, vendors will buy back their own stones for inexplicably high prices. One former official told Global Witness he "[had] no doubt that this is money laundering".<sup>82</sup>
- **Smuggling:** Jade businessmen estimate that companies smuggle between 50% and 80% of jade directly to China, bypassing official controls on both sides of the border.<sup>83</sup> (A map showing the routes used to carry jade to the

Chinese border is shown on page 25 above.<sup>84</sup>) Some describe how licensed companies typically sell high volume, low value jade through government-sanctioned channels, along with a token amount of "good jade ... for show" but other jade including top grade stones are smuggled.<sup>85</sup> This is in line with data from the 2015 emporium which shows that, out of over 8,000 sales lots, a mere two comprised imperial jade, the most valuable grade.<sup>86</sup>



A government official inspects jade in Hpakant, assessing its value and the amount of mine site tax to be charged before the stones are transported to market. This process is prone to corruption and smuggling, particularly of the most valuable stones, is endemic. CREDIT: Minzayar



The main official route for selling jade mined in Hpakant is through the Myanmar Gems Emporium in Myanmar's capital, Nay Pyi Taw. High, medium and low grade jade is sold to international buyers, particularly from China, the major consumer market for jade.



This half tonne block of commercial (medium-grade) jade was offered for sale at 12 million euros at the 2015 Myanmar Gems Emporium. According to those in the business, however, licensed companies typically offer only token amounts of their most valuable jade at the government sales in Nay Pyi Taw. The rest is smuggled directly to China, bypassing the emporium altogether.

## China's appetite for the stone of heaven

Jade has always held a special place in Chinese culture, as illustrated by the saying: "Gold has a value; jade is invaluable".<sup>87</sup> Traditionally associated with royalty and privilege, for today's expanding class of rich and super-rich in China the stone is a status symbol and this is pushing up demand and prices, particularly for top-quality jade. Conveniently, the world's main supplier is right next door.<sup>88</sup>



Jade is highly prized in China and is traditionally associated with royalty and status. Some of the highest profile cases in China's recent anti-corruption crackdown have involved the seizure of valuable jade carvings and jewellery. CREDIT: Adam Dean

Nearly all of Myanmar's jade goes to China, either formally or informally, and prices depend on Chinese demand.<sup>89</sup> According to several sources in the business, Chinese President Xi Jinping's current corruption crackdown is having a direct impact on the market and some of the highest profile corruption cases so far have involved jade. For example, over a hundred kilograms of jade was seized from the basement of the former vice chairman of China's Central Military Commission, General Xu Caihou.<sup>90</sup> Former provincial governor Ni Fake was found to have accepted US\$2 million in bribes, 80% of which were in carved jade, whilst mining tycoon Li Huan was accused of paying off government officials using the gemstone.<sup>91</sup>

As well as buying the stone, many Chinese investors are said to engage directly in mining jade, providing the funding to secure the best concessions and to bring in large-scale machines to work them.<sup>92</sup> Global Witness has heard multiple accounts of "shadow companies" being used to circumvent restrictions on foreign investment involving either Myanmar citizens providing a front for Chinese backers, or Chinese individuals taking Myanmar identities so as to directly control companies themselves.<sup>93</sup>

Industry figures described to Global Witness the joint arrangements which can be set up, with Chinese backers obtaining machinery using staggered payment plans or hire purchase arrangements not available to Myanmar people, whilst their local partners manage logistics and connections with high level power brokers.<sup>94</sup> One interviewee recounted being approached by a Chinese general, who was interested in partnering up and offered to facilitate the import from China of large trucks to use in the jade mines.<sup>95</sup> He estimated that the big jade players receive up to 70% of their financing from inside China.<sup>96</sup> The use of front companies to facilitate such arrangements adds an additional layer of opacity, making it even more difficult to work out who is really being given access to jade and what the implications are.



The architect of Myanmar's independence Aung San, together with Chairman Mao, overlooks a makeshift showroom in Yingjiang, a jade trade hub in Yunnan Province, China, near the border with Kachin State.

## The rise of the machines

As described in Chapter 4, in the early 1990s, Myanmar's military junta pushed the KIA/KIO out of Hpakant and then began parcelling the area into blocks which it handed out to companies it approved, as a means of consolidating control of Kachin State's most valuable resource.<sup>97</sup> Since then, the small-scale miners who previously mined the area have been squeezed out by state-licensed companies, which have brought in heavy machinery to carry out large-scale jade extraction. Jade mining



In their haste to dig for jade, the big mining companies have recently unleashed "vehicles [the size of] two storey buildings", each costing US\$2 million, on Hpakant's broken landscape.<sup>101</sup>

in Hpakant today is all about the biggest machines and the most rapid rate of extraction. This intensity stems from a series of perverse incentives:

- The need to pay substantial bribes makes the process of securing a good mine very costly. Licence-holders are in a hurry to extract jade as quickly as possible to recoup this initial outlay.<sup>98</sup>
- The short duration of the licences, which typically run for only three or five years, further encourages concessionaires to grab what they can, while they can.<sup>99</sup>
- Because the big companies are, in many cases, owned or aligned with entrenched military and ruling party figures, they have everything to lose if the rules of the game change following the November 2015 elections or in the event of an equitable peace agreement between Nay Pyi Taw and the KIA/KIO.<sup>100</sup>

The satellite images over the page show the intensification of jade exploitation over the two decades that the government has reigned in Hpakant. The question of who is benefitting from all of this is explored in the next chapter, where we profile some of the biggest licensed players in Myanmar's jade industry. We then turn to the adverse impact of their activities on local people in Chapter 3.



Up until the 1990s, jade mining was done by hand and the environmental footprint remained limited. This photo shows Hpakant Gyi – at the time the main jade mine – in 1994, the year that the KIA/KIO signed a ceasefire with government.



According to one industry source, a site which a year ago took 30 days to work can now be mined in only four days. The big question is who is really benefitting from the huge amounts of jade being extracted from Hpakant?<sup>102</sup>  
CREDIT: Minzayar

Expansion of jade mining  
in Hpakant since 1988

2015

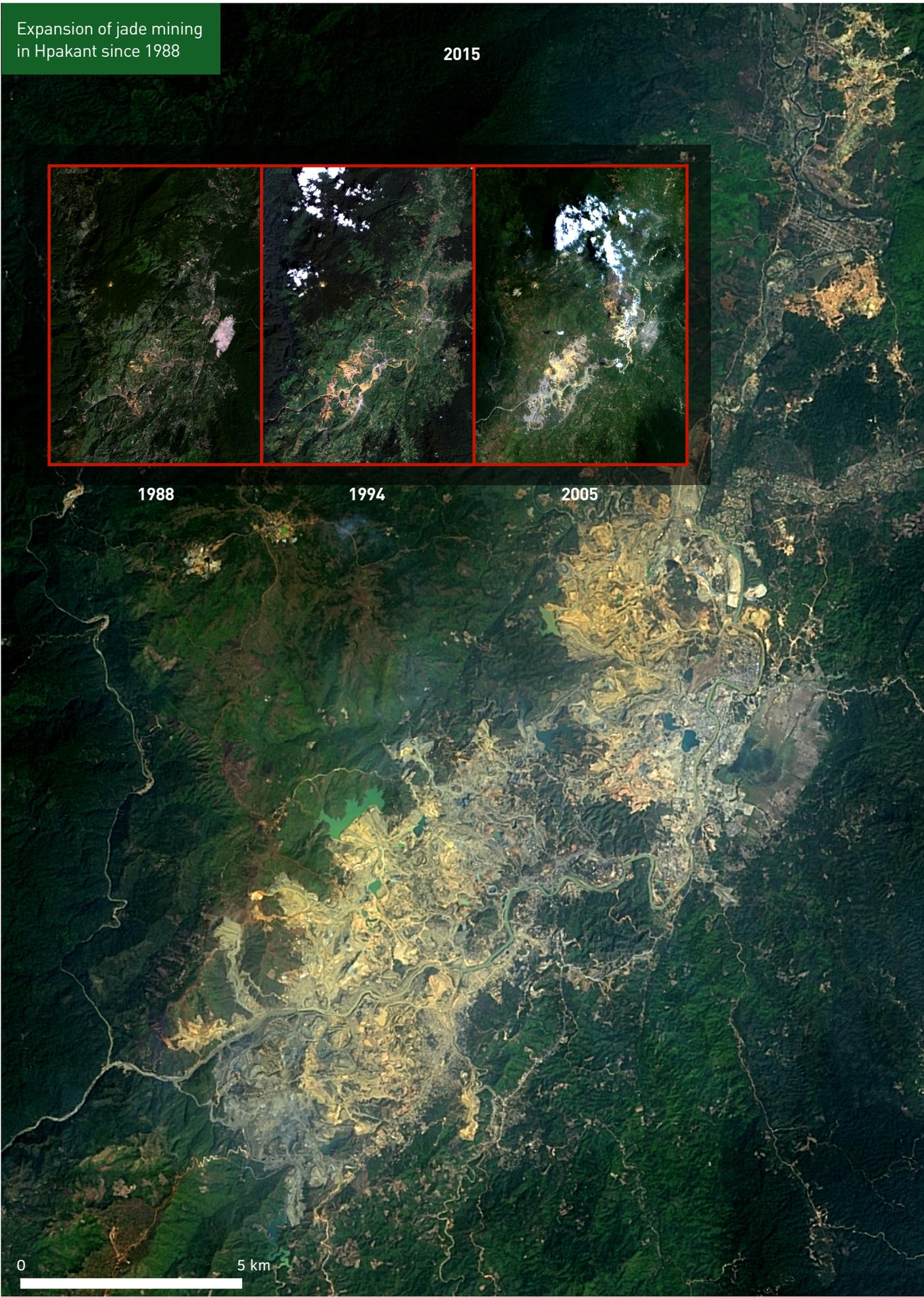


1988

1994

2015

0 5 km



## CHAPTER 2: WHO'S BENEFITTING?

The secrecy which pervades Myanmar's jade trade makes tracking down its real beneficiaries extremely difficult. This partly explains the lack of international attention on this issue to date.

Global Witness has identified some of the companies receiving licences from the Ministry of Mines / Myanmar Gems Enterprise, and pieced together who is really behind them. The main players can be divided into four, sometimes overlapping, categories:

- Military and ruling party families – families of retired generals associated with the Than Shwe military dictatorship and the ruling Union Solidarity and Development Party (USDP). Some are members of the current cabinet.
- Army companies – notably the infamous Myanma Economic Holdings Limited.

- 'Crony' companies – firms that emerged and flourished as proxies and favourites of the Than Shwe military junta.
- Drug lords – Myanmar's most famous drug lord Wei Hsueh Kang and associates, some of whom are subject to US sanctions for narcotics trafficking and money laundering.

The table below summarises the official pre-tax sales these major players made at the 2013 and 2014 emporiums. In some cases, buyers at the emporiums failed to make payment so these sales were not completed (according to Ministry of Mines information, only 55% of 2013 sales were completed; industry sources put the 2014 completion rate at 30%).<sup>103</sup> At the same time, as detailed in Chapter 1, industry estimates indicate that licensed companies typically smuggle between 50% and 80% of their jade directly to China. Consequently, these figures do not represent the true value of jade revenues, but they provide a useful indication.

### Who is making money from jade?

CATEGORY	NAME	2014 SALES <sup>104</sup>	2013 SALES <sup>105</sup>	TOTAL SALES
Army / USDP families	Than Shwe family and associated firm Kywe Wa Sone	US\$116,541,880	US\$103,499,788	<b>US\$220,041,668</b>
	Ohn Myint family	US\$80,429,544	–	<b>US\$80,429,544</b>
	Maung Maung Thein family	US\$105,430,521	US\$36,621,049	<b>US\$142,051,570</b>
				<b>US\$442,522,782</b>
Army companies	Myanma Economic Holdings Limited	US\$149,425,506	US\$80,492,459	<b>US\$229,917,965</b>
	Myanmar Economic Corporation	US\$32,000,008	US\$20,826,415	<b>US\$52,826,423</b>
	Northern Star	US\$1,070,355	–	<b>US\$1,070,355</b>
				<b>US\$283,814,743</b>
'Crony' companies	Ever Winner group of companies	US\$192,457,693	US\$123,881,602	<b>US\$316,339,295</b>
	Asia World	US\$27,264,433	US\$20,944,520	<b>US\$48,208,953</b>
	Htoo Group	US\$13,223,634	–	<b>US\$13,223,634</b>
				<b>US\$377,771,882</b>
'Ceasefire group'-related	Wei Hsueh Kang / United Wa State Army-associated	US\$43,009,842	US\$58,770,400	<b>US\$101,780,242</b>
	Ruby Dragon Group / Pa-O National Organisation-associated	US\$58,637,973	US\$46,141,698	<b>US\$104,779,671</b>
				<b>US\$206,559,913</b>
<b>GRAND TOTAL</b>				<b>US\$1,310,669,320</b>

This should ring serious alarm bells for the Myanmar government and its international partners. All four of these categories of players have much to lose from meaningful political reform and from peace in Kachin State. Their dominance of the jade business is denying opportunities for development to the people of Kachin State and Myanmar as a whole. But the implications go much further. In Myanmar's current political landscape, money is power. Everyone wishing to see peace and genuine democracy in Myanmar should urgently consider the implications of allowing hundreds of millions of dollars a year to be siphoned off by some of the most determined and ruthless opponents of reform.

## Military and political leaders and their families

### 1. Retired Senior General Than Shwe

Than Shwe is synonymous with the darkest days of military rule in Myanmar. The junta he led from 1992-2011 denied citizens their basic human rights, undertook vicious counter-insurgency campaigns and launched bloody crackdowns against opponents.<sup>106</sup>

The former dictator is widely believed to retain considerable power through his influence over the still-dominant Myanmar military.<sup>107</sup> In June 2015 he is reported to have warned Union Solidarity and Development (USDP) party head Thura Shwe Mann, President Thein Sein and Tatmadaw (armed forces) Commander-in-Chief Min Aung Hlaing, that he might "take things into my own hands".<sup>108</sup> In August Thura Shwe Mann, who had recently proposed ending the military's de facto veto on changes to the constitution, was deposed in a "palace coup".<sup>109</sup>

Meanwhile, Than Shwe's family continues to play gatekeeper to choice cuts of Myanmar's economy. According to one well-respected analyst, money is the basis for authority in the new Myanmar and "If you want to do business, you have to deal with Than Shwe's family."<sup>110</sup>

Previously unpublished government jade concession maps and company records shows that Than Shwe's sons, Kyaing San Shwe and Htun Naing Shwe, control two companies called Kyaing International and Myanmar Naing Group which have obtained licences to six jade mines in Hpakant. According to a senior Ministry of Mines official, mining concessions were handed to the Kyaing International company without any of the usual procedures being followed.<sup>111</sup>



Officially, Senior General Than Shwe stepped down as Myanmar's head of state in 2011. However, it is widely believed that he continues to exert considerable power through his influence over the still-dominant Myanmar military. Is the money his family is making from jade being used to maintain his behind-the-scenes influence?



Whilst former dictator Than Shwe is said to have devolved some of his control over family businesses to his children and grandchildren, his wife, Daw Kyaing Kyaing, is reported to remain very much involved.<sup>112</sup> One of the family's jade companies is called Kyaing International. Locals in Hpakant have also named a lake, created by a mining crater filling with water, after the former first lady of Myanmar.

A third firm – Kywe Wa Sone, registered under its English name Richest Gems – is run by a director of Kyaing International and Myanmar Naing Group named Win Tin, who shares a registered address with two of Than Shwe’s sons.<sup>113</sup> Long-time jade

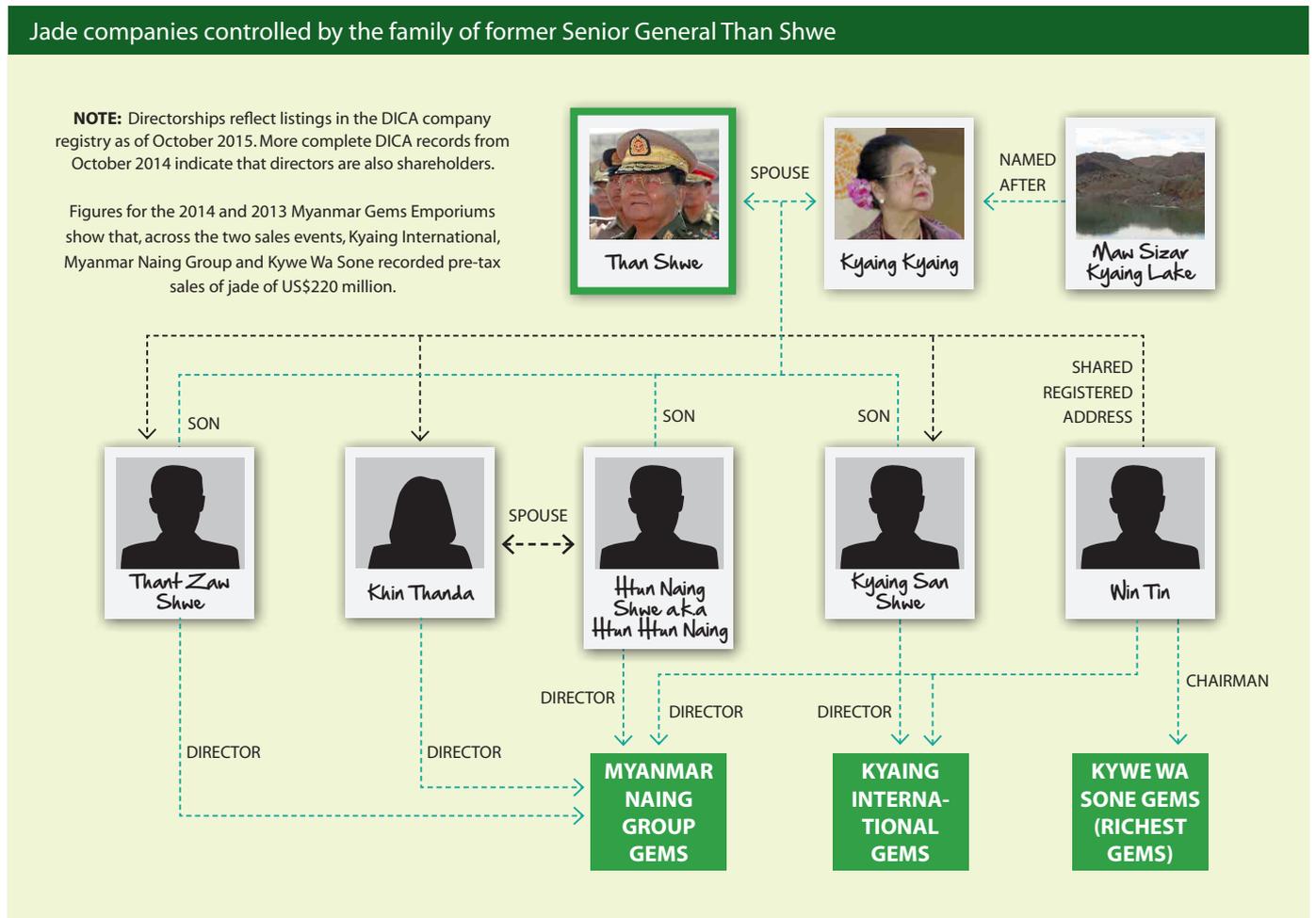
industry monitors identify this company as part of the same group of businesses as Kyaing International.<sup>114</sup> Kywe Wa Sone controls a further three jade mines in Hpakant.

**Hpakant jade mines controlled by Than Shwe family companies and Kywe Wa Sone**  
*NB names of mines typically include a number, such as Maw Sizar (#2)*

KYAING INTERNATIONAL	MYANMAR NAING GROUP	KYWE WA SONE
Maw Sizar (#2) <sup>115</sup>	Kaday (#5) <sup>116</sup>	Wah Kye (#6) <sup>117</sup>
Kyet Paung Chaung Phyar (#1) <sup>118</sup>	Ma Mone (#5) <sup>119</sup>	Thaung Cho (#2) <sup>120</sup>
Myauk Phyu (#1) <sup>121</sup>	Gwi Hka (#1) <sup>122</sup>	Ma Mone (#3) <sup>123</sup>

Figures for the 2014 and 2013 Myanmar Gems Emporiums show that, across the two sales events, Kyaing International and Myanmar Naing Group recorded pre-tax sales of US\$70 million.

If one adds in the sales notched up by the associated Kywe Wa Sone company, the total take across the two emporiums leaps to US\$220 million.<sup>124</sup>



The relationship between the Than Shwe family jade empire and China is unclear, but many claim that the family's jade mining operations are, in practice, undertaken by Chinese nationals.<sup>125</sup> The Kyaing and Naing companies are also reported to operate in partnership with a group of companies associated with the United Wa State Army / United Wa State Party (UWSA/UWSP), which is profiled later in this report.<sup>126</sup> Until recently Kywe Wa Sone shared a director with Wa firm Tet Kham Gems, which is run by Aik Haw, the son-in-law of UWSA/ UWSP leader Pao Yu Hsiang.<sup>127</sup> Tet Kham Gems, Aik Haw and Pao Yu Hsiang are all on the US sanctions list because of their links to the narcotics business.<sup>128</sup>

The Than Shwe family's mining in Hpakant is heavily mechanised and takes little account of the interests of local people living in the area.<sup>129</sup> Their companies' concessions are protected by armed military and police officers who are charged with deterring unwanted visitors.<sup>130</sup> Such is the notoriety of the Kyaing International company that the flooded mine crater gouged into the famous Maw Sizar jade tract where the firm operates has been named 'Maw Sizar Kyaing Lake' after Than Shwe's wife, Daw Kyaing Kyaing.<sup>131</sup>

The Than Shwe's family's stake in a corrupt and militarised jade business poses a serious challenge to reformers' efforts to bring real change to Myanmar's extractive industries, and to peacemakers' attempts to forge a lasting settlement in Kachin State. But the potential repercussions stretch well beyond Kachin. The former dictator's family is famous for its lavish weddings, luxury real estate and extravagant shopping trips.<sup>132</sup> But as Myanmar prepares for historic elections and a possible political transition, some fear hardliners may use their illicit wealth to finance sectarian violence and political dirty tricks.<sup>133</sup> Myanmar's people urgently need answers on what Than Shwe's family are doing with their ill-gotten jade loot.



A villager looks on as dump trucks from the Than Shwe family's Kyaing International mine pass by, Seng Ja Bum village, Hpakant. CREDIT: Minzayar



A still from a video of the ostentatious wedding of Than Shwe's daughter, Thandar Shwe to army major Zaw Phyo Win which was leaked to the press in 2006.<sup>134</sup> The clip provided a glimpse into the family's lavish lifestyle, sparking outrage as people questioned where the money for the ropes of jewels, rounds of champagne and multi-million dollar gifts was coming from.



According to one commentator, "if you want to do business in Myanmar, you have to deal with Than Shwe's family".<sup>135</sup> The business interests of Than Shwe's sons Htun Naing Shwe and Kyaing San Shwe extend beyond jade. They are widely reported to be the owners of the J's Donuts chain of pastry shops in Myanmar. CREDIT: Minzayar

## 2. Minister for Livestock, Fisheries and Rural Development Ohn Myint

*"I dare to slap anybody's face."*

Minister Ohn Myint

Minister Ohn Myint has long exercised considerable influence over the fate of Hpakant's resources. His previous roles include member of parliament for Hpakant and Tatmadaw Northern Commander – the top general in Kachin State.<sup>136</sup> Many Kachins accuse Ohn Myint of exploiting his Northern Commander position to solicit bribes, seize a share of major jade finds, promote the jade businesses of 'crony' companies, and sow division amongst the different ethnic and political groups in the state.<sup>137</sup>

According to jade industry sources, Ohn Myint's family owns a lucrative jade mining venture called Myanmar Win Gate, which is named after British World War II general Orde Wingate.<sup>138</sup> DICA company records show that:

- Myanmar Win Gate Gems and Jewellery Mining Co. Ltd was incorporated in 2007, during Ohn Myint's tenure as Tatmadaw Northern Commander in Kachin State.<sup>139</sup>

- Its managing director and 40% shareholder is Kyaw Thiha, which is the name of Ohn Myint's son.<sup>140</sup>
- Another director and owner of 30% of the company's shares is Daw Nway Ei Ei Zin, which is the name of Kyaw Thiha's wife.<sup>141</sup>

Government maps and a KIA/KIO register of jade mines designate Myanmar Win Gate as the concessionaire for the Wah Kye (#5) and Gwi Hka Lone (#4) mines in Hpakant.<sup>142</sup> Army company Myanma Economic Holdings Limited has told Global Witness that Myanmar Win Gate is one of its jade mining partners.<sup>143</sup>

Myanmar Win Gate did not figure in the unpublished 2013 Myanmar Gems Emporium figures reviewed by Global Witness. But at the 2014 event, the company posted pre-tax sales of US\$80 million.<sup>144</sup> This included the sale of a single 24 kilogram piece of jade for nearly US\$40 million.<sup>145</sup>



A military history enthusiast, Ohn Myint has reportedly named his jade company after British Major-General Orde Wingate, the commander of a special operations force which operated in Myanmar during World War II.



In 2005, Ohn Myint was appointed Northern Commander, a military post which gave him exceptional power over the administration, economy and local population in Kachin State. Today, he holds the civilian post of Minister of Livestock, Fisheries and Rural Development, but he retains an interest in Kachin State through his family's Myanmar Win Gate jade company.

## The Minister for Livestock, Fisheries, Rural Development... and slapping

Minister Ohn Myint hit the headlines in 2014 following a speech he gave to a group of villagers in Magwe Division who had requested a water purification system:

**Unapologetic Minister will 'dare slap anyone'**

By DVB

5 February 2014 Print Email

Like 0 Tweet 0 G+1



Burma's Minister of Livestock Breeding, Fisheries and Rural Development, Ohn Myint, is under fire in Parliament for vile threats to rural residents in Tenasserim and Magwe divisions. An emergency proposal has been submitted for the government to take immediate action.

*"There is no country who really loves Myanmar or helps us. They may f\*\*\* your front or maybe the back. Ok? f\*\*\* your front or back. No one is giving you anything for free."*

*"I am sent from the Army, I am not a politician. I am not elected, but selected. So you know about this, I am telling you."*

*"I don't give a f\*\*\* about any politicians. You guys remember! I have been giving speeches saying that I am General Ohn Myint – General Ohn Myint who is travelling all over and I dare to slap anybody's face."*

*"I will begin with political language. The political language is to attack to those who insult the ruling government. If a verbal attack from me does not work, they will be put in jail. This is as it is practiced internationally. Those that oppose the government, go! Stay in jail. You be released when our government's term ends. That's it."<sup>146</sup>*

These comments prompted a protest in Yangon in which the demonstrators challenged the minister to come and slap them.<sup>147</sup>

### 3. Former Ruling Party General Secretary Maung Maung Thein

Retired general Maung Maung Thein is the recently deposed General Secretary of the ruling Union Solidarity and Development Party (USDP), a former fisheries minister and a member of the *Pyithu Hluttaw* (lower) chamber of Myanmar's parliament.<sup>148</sup> He has a reputation as a political hardliner. Global Witness has previously uncovered evidence of his son's involvement in illegal logging.<sup>149</sup>



Retired general Maung Maung Thein was, until recently, the General Secretary of the ruling Union Solidarity and Development Party. Reputedly a political hardliner, Maung Maung Thein is behind two jade mining companies which recorded official pre-tax sales of over US\$140 million in 2013 and 2014.

Two jade businessmen with extensive knowledge of the key players in Hpakant told Global Witness that Maung Maung Thein controls both Myat Yamon and Myo Nwe jade mining companies, which are listed in government maps as running the Kaday (#2) and Ma Na (#1) mines.<sup>150</sup> Local people living near the Kaday (#2) mine also identified Maung Maung Thein as the owner of Myat Yamon.<sup>151</sup>

These statements are supported by other data, notably company registry records, which show that:

- Myat Yamon and Myo Nwe companies share an office, as well as a director and shareholder.<sup>152</sup>
- One of Myo Nwe's three listed directors and shareholders is Nay Aung, which is the name of one of Maung Maung Thein's sons, according to the politician's profile on the Myanmar parliament website.<sup>153</sup>
- Myo Nwe director Nay Aung's NRC (national registration card) number (13/KAMANA(NAING)001592) immediately precedes that of Maung Maung Thein's son Min Thein: (13/KAMANA(NAING)001593), suggesting that the two were registered in the same township at the same time.<sup>154</sup>

It is possible, just, that the Nay Aung involved in Myo Nwe company is not the brother of Min Thein but coincidentally has the same name and registered for an NRC card at the same time and place as Min Thein did. However, it is common in Myanmar for families to register more than one child at a time and therefore for siblings to be issued with sequential or near-sequential NRC numbers.<sup>155</sup>

Global Witness wrote to Myo Nwe director Nay Aung and put it to him that he was the son of Maung Maung Thein and that Maung Maung Thein was the beneficial owner of Myat Yamon and Myo Nwe companies. Nay Aung replied to say that he would not be able to answer the questions at this time.<sup>156</sup>



Myat Yamon mine site Kaday (#2), Kaday Village, near Lone Khin, Hpakant. According to locals the Myat Yamon mine is one of the most heavily guarded in Hpakant and conditions are notoriously dangerous. CREDIT: Minzayar



Waste water draining from the Myat Yamon site near Kaday Village, Hpakant. According to local residents, water from a drainage channel created by the company has destroyed nearby homes. CREDIT: Minzayar



Flooded crater left by Myat Yamon company, Hpakant. CREDIT: Minzayar



Stills from a video of a massive mud slide that took place at the Myat Yamon Kaday (#2) mine in April 2015. Local residents put the death toll at 30 to 60 people. The accident is said to have occurred due to the company's persistent dumping of tailings on a bed of liquid mud above the mine. The waste then shifted and flooded into the crater, engulfing workers and machines in its path.

According to local residents, the Myat Yamon mine is one of the most heavily guarded in Hpakant, and conditions are notoriously dangerous.<sup>157</sup> In April 2015, a torrent of mud and waste water ripped through Myat Yamon's Kaday (#2) mine, killing between 30 and 60 people, according to local residents.<sup>158</sup>

But this poor safety record has not stopped Maung Maung Thein companies generating eye-watering sums of money. At the Myanmar Gems Emporiums in 2014 and 2013, the Myat Yamon and Myo Nwe companies and joint ventures recorded between them pre-tax sales over US\$140 million.

#### 4. The tip of the iceberg?

Global Witness: *"We have heard that most jade mining companies probably have involvement from military families. Does that fit with your understanding?"*

Former official: *"Not probably, definitely! If military families do not have a jade mining company the others will kick them out. Those without one will be seen as black sheep. They will not be speaking the same language."*<sup>159</sup>



Deputy Minister for Social Welfare, Relief and Resettlement, Phone Swe, is another USDP party heavyweight with a stake in Myanmar's lucrative jade industry.

In addition to these heavyweight figures, Global Witness' investigation found other big hitters in Myanmar's ruling party holding interests in the jade trade, including two deputy ministers:

- Retired General **Phone Swe is Deputy Minister for Social Welfare, Relief and Resettlement.** As such, he is responsible for the wellbeing of 100,000 people in Kachin State who have been displaced by a conflict that relates, at least in part, to the jade that his Shwe Innwa Gems company is mining.<sup>160</sup>
- **Deputy Minister for Communications and Information Technology Win Than** was previously a major general, director of defence procurement in the Ministry of Defence and managing director of Myanmar Economic Holdings Limited.<sup>161</sup> DICA records retrieved in October 2014 list him as the sole shareholder of Myanmar Imperial Jade (Gems & Jewellery) Co. Ltd, which is MEHL's main jade-mining and trading subsidiary.<sup>162</sup>

When MEHL agreed to meet with Global Witness in February this year, the army company proposed that General Win Than attend the meeting as a company representative.<sup>163</sup> In a letter sent subsequently to Global Witness, MEHL denied that he was a shareholder in Myanmar Imperial Jade, however.<sup>164</sup> MEHL's role in the jade business is profiled in the next section.

We believe that these findings are just the tip of the iceberg. Many familiar with the jade business say that if you crack the shell of any major jade company, you will find a military family inside. This is the question reformers should be most worried about: who else in the USDP / Tatmadaw hierarchy is benefitting from Kachin State's jade?

## Army companies

Companies controlled by military families cast a long shadow over the jade business, but that is not the end of the Tatmadaw's involvement. The army also has its own, formally constituted, conglomerates which make huge sums from jade. Previously unpublished figures from the 2014 and 2013 Myanmar Gems Emporiums show that across the two events, these firms collectively recorded pre-tax sales of at least US\$280 million.<sup>165</sup> This begs the inevitable questions of where the money is going and whether it is being used to wage the government's war against the KIA/KIO in Kachin State.

### The Tatmadaw's top-ranking business: Myanmar Economic Holdings Limited<sup>166</sup>

Global Witness is aware of at least four army companies involved in jade mining: Myanmar Economic Holdings Limited (MEHL), Myanmar Economic Corporation (MEC), Shwe Innwa Gems (mentioned in previous section) and Northern Star Gems.<sup>167</sup> The most important and notorious of these is the US government-sanctioned Myanmar Economic Holdings Limited (MEHL). Over the years this sprawling company has profited from exclusive licences to import high value products, from tax exemptions and from foreign investors being forced to make joint ventures with it.<sup>168</sup> Along with its sister company MEC, it is broadly understood to provide off-budget finance for secret military projects and an income stream for retired army officers.<sup>169</sup>

Some analysts have highlighted how MEHL and MEC have had their wings clipped by economic reforms that have trimmed their de facto monopolies, yet others suggest that behind the scenes their grip on important revenue flows remains significant.<sup>170</sup> Our research suggests jade is one such example.



Myanma Economic Holdings Limited has faced controversy over its joint venture copper mining project in Letpadaung. Accusations of land grabbing and violence against protestors, including the use of white phosphorus, have made the project notorious within Myanmar and beyond. CREDIT: Burma Partnership/Han Win Aung

### MEHL and jade: "The sleeping partner that takes the lion's share"<sup>171</sup>

MEHL is a prominent player in Myanmar's extractive industries and its Letpadaung copper mine project has faced persistent allegations of land-grabbing, pollution and the use of violence against protestors.<sup>172</sup> There has been far less scrutiny of its extensive portfolio of jade mines, however.

MEHL first became involved in jade mining in 1995 after the government took control of Hpakan from the KIA/KIO, and it proceeded to dominate the business for the next decade.<sup>173</sup> During this period the conglomerate helped itself to large tracts of the best jade land, over the heads of the Ministry of Mines.<sup>174</sup> Many of the main jade mining companies in Hpakan worked as its subcontractors.<sup>175</sup> One notable case is Xie Family Company, profiled later in this report, one of whose directors is the joint venture partner of Coca-Cola in Myanmar.<sup>176</sup> MEHL also organised its own jade auctions.<sup>177</sup>

Things began to change from April 2000 when, under the auspices of Military Intelligence chief and State Peace and Development Council (Than

Shwe junta) Secretary Number One Khin Nyunt, the government began encouraging private companies to enter into joint ventures with the Ministry of Mines.<sup>178</sup> Hereafter MEHL's dominance diminished, but it has remained one of the largest and most formidable of the jade mining companies in Hpakant.<sup>179</sup> In the words of one long-time observer of the gems and minerals business, "MEHL is as powerful as ever."<sup>180</sup>

In February 2015 MEHL met with Global Witness to discuss its mining ventures and its participation in the EITI. For a company which has a reputation for opacity, this was an encouraging move.<sup>181</sup> The MEHL officials – who included Colonel Khin Maung Latt, the managing director of subsidiary firm Myanmar Imperial Jade Company – emphasised their awareness of, and support for EITI as follows:

*"EITI is a unique opportunity for the extractives industry... MEHL will cooperate with whatever EITI requires. Working with other companies, we'll comply with Myanmar EITI and with higher EITI authorities."*<sup>182</sup>

The company representatives also made several specific comments with regard to the MEHL jade business. Some of these confirm statements made by other industry sources while others present a very different picture:

**MEHL says that it is not a leading company in the jade mining business and has licences to only 150-200 acres of jade mines in Kachin State.**<sup>183</sup>

But this does not tally with data from official documents and testimony from those in the business. Government maps designate around 300 acres as licensed to MEHL.<sup>184</sup> This does not include mines run under the names of joint venture partners. One such partner estimates MEHL's share of Hpakant's jade tracts to run to 1,000 acres in all.<sup>185</sup>

**MEHL confirmed that it works through joint venture partners**, which are said to include a number of Chinese companies.<sup>186</sup> The partners MEHL named included the Myanmar Win Gate company owned by the family of Minister Ohn Myint and Jing Hpaw Aung, which is owned by KBZ Group.<sup>187</sup> MEHL stated that the production split with its partners was a secret but is generally 20% for the army firm and 80% for the private company.<sup>188</sup> This contrasts with the accounts of four businessmen that have partnered with MEHL and one industry representative, who all say that MEHL takes a 40% share.<sup>189</sup>

**MEHL says that it follows the rules laid down by the Ministry of Mines and that its jade mining is not regulated by the military.**<sup>190</sup> However others in the jade trade characterise the conglomerate as a thuggish entity which seizes mines and foists itself on other concessionaires with impunity, often in collaboration with 'crony' companies such as Tay Za's Htoo Trading.<sup>191</sup> In a letter to Global Witness, MEHL denied these charges.<sup>192</sup>

Another allegation made by a sometime partner of MEHL is that the army company uses the emergency powers provision of the Myanmar Penal Code – Section 144 – to seize valuable jade land for its mining operations: "Everyone is scared of Section 144, even children. 144 means they'll shoot us if we go there. If they have 144, they can do what they like."<sup>193</sup> One Myanmar Gems Enterprise map reviewed by Global Witness marks an area near San Hkar village bordering a MEHL mining concession as a Section 144 zone, but it is not clear whether it is being mined or not.<sup>194</sup> In response to this accusation, MEHL says that "MEHL does not have the authority to enact Section 144. Only the Ministry of Home Affairs has the authority to enact and announce Section 144 in accordance with procedures."<sup>195</sup>

**The head of MEHL's Myanmar Imperial Jade subsidiary, Colonel Khin Maung Latt, describes it as a management company and explained that MEHL relies on its partners to carry out the actual mining operations.**<sup>196</sup> This fits with the accounts from a firm that has previously partnered

with MEHL. This partner describes how the army firm appoints a military officer, usually a retired major, as its representative at mine sites in which it has a stake.<sup>197</sup> Companies are said to regard the officers as a nuisance because they have limited knowledge of jade or how to run a business but insist on giving the orders.<sup>198</sup> In one case this interference is reported to have been so extreme that the MEHL partner asked the Ministry of Mines to cancel its mining licence.<sup>199</sup> Others in the business similarly complain that MEHL's parasitic behaviour stops its partners turning a profit.<sup>200</sup>

Some evidently see MEHL staff's ignorance as an advantage however. One jade businessman noted that partner companies could just show the military officers "something green" as evidence of their mining production and smuggle the rest of the jade out under their noses.<sup>201</sup> Another stated that whenever companies found valuable jade they would simply bribe the MEHL representative not to enter it in their stock records.<sup>202</sup> In a letter to Global Witness, MEHL stated that "We have been instructed not to accept any bribes or engage in any bribery... We also impose very strict policies on all our employees with regard to such actions. Any employee found to be engaged in bribery will be subject to penalties or legal proceedings."<sup>203</sup>

## Pension fund or war chest?

At the 2014 Myanmar Gems Emporium MEHL's Myanmar Imperial Jade subsidiary recorded the second highest sales figures of any company, with private and joint venture lots together totalling almost US\$150 million.<sup>204</sup> MEHL representatives bristle at the suggestion that their ventures pay for defence procurement and insist that revenues are spent only on the welfare of soldiers' families and national development.<sup>205</sup> But both MEHL and sister company MEC have their work cut out to persuade the public that they are something other than "an immense slush fund on behalf of military leadership" or, worse still, one of the major cogs in the Tatmadaw's war machine in Kachin State.<sup>206</sup>

In this regard, MEHL's support for EITI is a good start and provides the company with a platform

for publicly disclosing such data as its licences, ownership of extractive companies, including subsidiaries and joint ventures, contracts, payments to the government and shares of production and other revenues collected in kind. Ultimately what is required, however, is for the Nay Pyi Taw government and legislators to draw a line under the era of the military conglomerate by passing legislation that prohibits the military, police and other security services, and their individual serving officers, from establishing, operating, or exercising beneficial ownership over companies.



An allegation made against Myanmar army company MEHL is that it uses the emergency powers provisions of the Penal Code to take control of areas of Hpakant, and keep others out. CREDIT: Minzayar



What do the army companies do with the jade revenues they receive? MEHL disputes allegations that it is a slush fund for the Myanmar army, insisting that its jade money is spent instead on the welfare of soldiers' families and national development. Full transparency is essential to put the rumours to rest and address public fears about where the jade money is going.

## Crony companies

The military are not the only ones who benefit from Myanmar's vast jade trade at the expense of ordinary people and the environment. A number of major jade companies are owned by or otherwise associated with 'crony' tycoons with connections to the pre-2011 military junta. Again, this poses a serious potential obstacle to reform and underscores the need to bring greater transparency to the jade sector, particularly regarding companies' ultimate beneficial ownership, as quickly as possible.

### 1. Ever Winner

Ever Winner is one of the most powerful clusters of jade companies and its role exemplifies many of the most troubling aspects of the business. The group's origins, ownership, and operations are obscure. It controls and benefits from some of Kachin State's most valuable assets and yet members of the public – whether Kachin or Myanmar – have no access to information about what it is taking from Hpakant, or where the money goes.

Ever Winner has close connections with politically influential tycoons, notably Aung Ko Win, the head

of KBZ Group of Companies, and media mogul Kyaw Win, the owner of the Shwe Than Lwin companies. The relationship between KBZ and Ever Winner is described in more detail in the next section. A further hint of high level connections comes in the form of the Buddha statue made from Ever Winner jade which President Thein Sein presented to a pagoda in China in June 2014.<sup>207</sup>

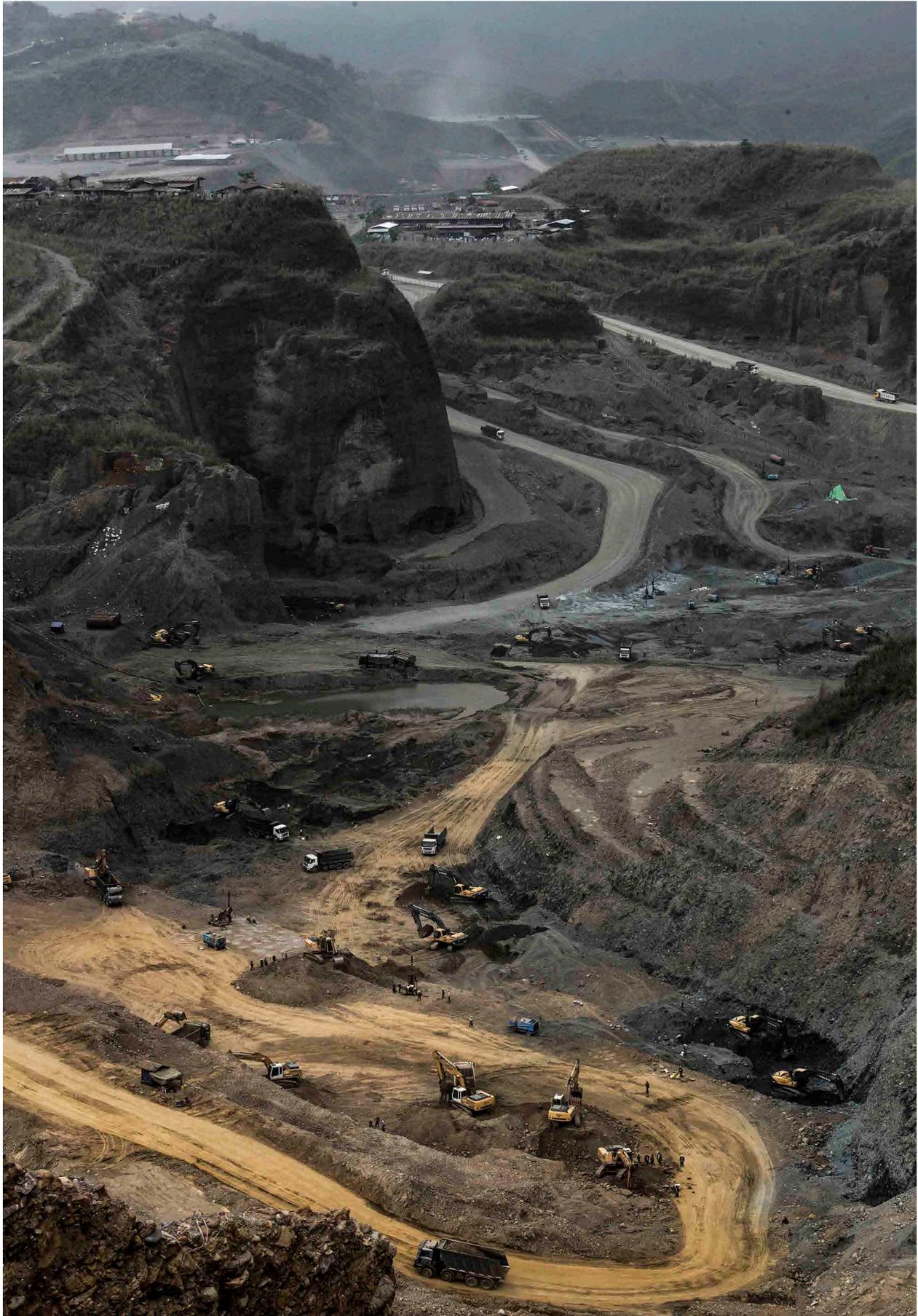
In 2014 companies that Global Witness believes to be members of the Ever Winner group together with partner firms recorded pre-tax sales of over US\$190 million at the Myanmar Gems Emporium. In 2013 the group and its partners posted combined pre-tax sales of over US\$120 million.<sup>208</sup>

### The Ever Winner web

Ever Winner has been a major force in the jade business for at least a decade. The big boss is Aike Htwe, also known by the Chinese name Zhang Yingchun. At least two of his five daughters are also involved in the business.<sup>209</sup> Aike Htwe's key lieutenants are Dr Tun Kyi, who is said to be his brother-in-law, and Dr Saw Lin, who is also reported by some sources to be a relative by marriage.<sup>210</sup> These two men manage a range of associated jade mining ventures for the Ever Winner group, as described in the chart over-page.<sup>211</sup>

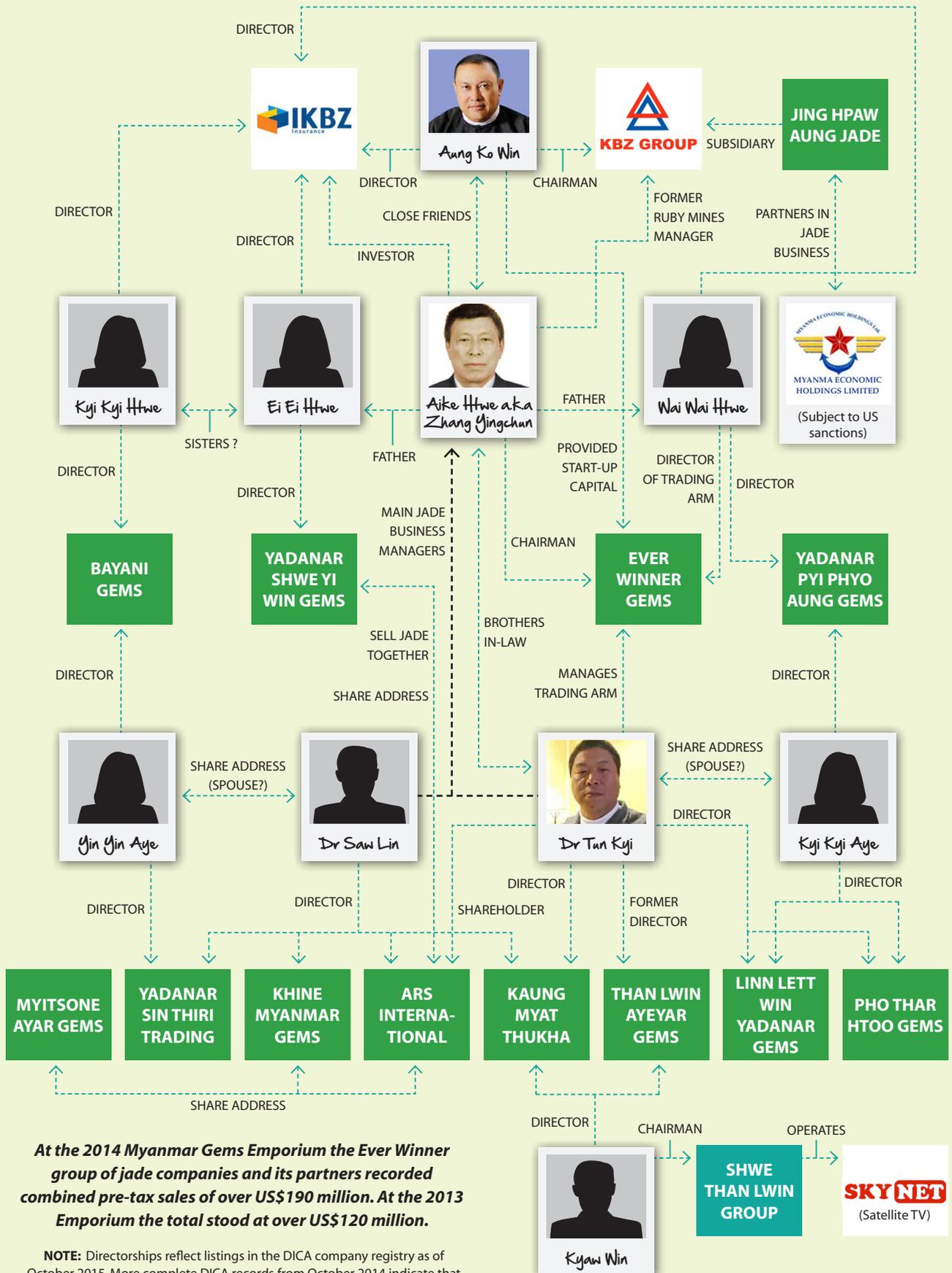


In June 2014, President Thein Sein presented this Buddha statue made from Ever Winner jade to a pagoda in China. This hints at the high level connections those behind the Ever Winner group may have, and underlines the need for greater transparency regarding who these individuals are.



One of the sites mined for jade by Ever Winner, near Nam Maw, Hpakant. The Ever Winner group is one of the most powerful players in the business, and is connected to politically influential tycoons; yet the group's origins, ownership and operations remain obscure. CREDIT: Minzayar

Connections between Myanmar's biggest jade business and its biggest bank: the Ever Winner group and KBZ



**At the 2014 Myanmar Gems Emporium the Ever Winner group of jade companies and its partners recorded combined pre-tax sales of over US\$190 million. At the 2013 Emporium the total stood at over US\$120 million.**

**NOTE:** Directorships reflect listings in the DICA company registry as of October 2015. More complete DICA records from October 2014 indicate that directors are also shareholders.

Aike Htwe is described by his former employer KBZ as "the most successful jade miner in Myanmar" and by a Chinese commentator as Myanmar's largest jade mine owner.<sup>212</sup> Chinese media and government publications state that he is the honorary vice-president of the Chinese Jewellery and Jade Industry Association and the Chairman of the Yunnan Chamber of Commerce in Yangon.<sup>213</sup>

Like several other big jade mining firms, Ever Winner is in fact a web of companies which have different names but are known to people in the business and residents of Hpakant as part of the same entity.<sup>214</sup> The use of a range of names may be an attempt to disguise the scale of the Ever Winner group's dominance of the jade business and its ultimate beneficial ownership. Company registry records that show overlapping directorships and shareholdings, as well as government documents and testimony from jade businessmen and local residents, suggest that there are at least a dozen Ever Winner companies active in Hpakant or in selling jade.<sup>215</sup>

In a letter to Global Witness, Aike Htwe's daughter Ei Ei Htwe stated that she was a director of Yadanar Shwe Yi Win Gems and not a director of Ever Winner. However, she did give answers to questions about Ever Winner and she denied that it is a group of companies. She added that "My family members have invested in Yadanar Pyi Phyo Aung Gems and Bayani Gems along with other business investors. However, these companies have different management teams with different shareholders and they are not under Ever Winner. The rest of the companies that are mentioned in the letter [the eight firms indicated in the bottom row of the Ever Winner chart] are not related to Ever Winner."<sup>216</sup>

In legal terms, this may be correct: Ever Winner is not incorporated as a group, neither does it have formally listed subsidiaries. However, in practice it does appear to operate as an association of inter-related firms.

## The Ever Winner group's fatal footprint

Like the Than Shwe family-run Kyaing International, Ever Winner's imprint on Hpakant is now so indelible that it has a flooded mine crater – Ever Lake – named after it.<sup>217</sup> The group is one of a small number of jade mining ventures that have recently deployed exceptionally large Komatsu PC2000 backhoe diggers to accelerate their jade production. According to one machinery supplier, Ever Winner has recently purchased 40 such machines, each weighing around 200 tonnes and priced at US\$2 million apiece.<sup>218</sup>



Dr Tun Kyi is reported to be the brother-in-law of Ever Winner boss Aike Htwe, and is a manager for the Ever Winner Trading company. He is the director of three firms that are part of the Ever Winner jade mining group: Lin Lett Win Yadanar, Pho Thar Htoo Gems and Kaung Myat Thukha, and is a shareholder in a fourth – ARS International.



'Ever Lake' in Seng Ja Bum Village, Hpakant; so-called because it was formed from a crater caused by the Ever Winner company's past mining operations. Now it serves as a dumping ground for mining companies looking to dispose of waste from their operations and locals fear the lake may overflow and cause flooding. CREDIT: Minzayar

The Ever Winner companies have a poor safety record when it comes to disposing of the waste from their mining operations. Yadanar Sin Thiri, managed by Dr Saw Lin, was one of three firms that were using a tailings dump in the Maw Mau Bum area which collapsed in early January 2015, killing a number of jade hand-pickers.<sup>219</sup> In March, a machine owned by another Ever Winner group company, Lin Lett Win Yadanar, which is run by Dr Tun Kyi, killed a jade hand picker at a tailings dump near Lone Khin. The victim's family claim that the company refused their requests for compensation.<sup>220</sup>

nearest private sector rival. What is it doing that its competitors are not? Does jade provide part of the answer and, if so, where and whom is it coming from?<sup>221</sup>



The accessories of a small-scale miner named Zaw Win Maung who died in March this year, leaving behind a wife and five-year-old son, after being hit by a backhoe digger at a waste dump being used by the Ever Winner-associated company Lin Lett Win Yadanar. The miner's family says that the company has not taken any responsibility for his death and has refused requests for compensation. CREDIT: Minzayar



Kanbawza or KBZ Group is one of Myanmar's largest businesses and by far the largest bank. Has jade helped KBZ head Aung Ko Win outgrow his rivals? KBZ claims it has not been involved in jade mining in Hpakant since 2003, but a range of sources tell a different story. CREDIT: Minzayar

## 2. KBZ Group

Kanbawza, or KBZ Group, owned by tycoon Aung Ko Win and his family, is one of Myanmar's biggest companies and includes the country's largest bank. KBZ has a dedicated jade mining subsidiary, but in meetings and correspondence with Global Witness has stressed that it plays only a small part in the industry.

According to a leading economic analyst, KBZ's bank is now around three times larger than its

## Competing histories

KBZ has won a range of awards, internationally as well as in Myanmar.<sup>222</sup> It tops the Ministry of Finance's list of Income Tax-paying companies for the financial year 2013-2014.<sup>223</sup> It also came out top in a 2014 survey of leading Myanmar companies' levels of transparency by the Myanmar Centre for Responsible Business and third in the equivalent index in 2015.<sup>224</sup> Its code of conduct contains an anti-corruption policy.<sup>225</sup> Unusually for a Myanmar company, it has a statement about its beneficial ownership on its website.<sup>226</sup>

While the company's commitment to greater transparency is laudable, its relationship with the jade business remains opaque. In meetings and correspondence with Global Witness, KBZ has downplayed its role. Company representatives say that KBZ mined jade at the Hpakant Gyi (#2) mine in Hpakant from 2000-2003 but then stopped because of risks of environmental damage and civil unrest.<sup>227</sup> They add that they then switched

their attention to Hkamti, a deposit in Sagaing Division that is generally considered far less productive than Hpakant.<sup>228</sup> KBZ says that the only jade it now trades is from its two Hkamti mines and that it has no activities in Hpakant.<sup>229</sup>

Other sources suggest a rather different chronology and level of involvement in Hpakant, however. A 2008 US Embassy cable, which reported on a meeting with Aung Ko Win, describes him as "owner of several jade and gem mines in Mong Hsu [a ruby mining site in Shan State] and Hpakant".<sup>230</sup>

Meanwhile, a KBZ 2011 brochure states that the company mines jade in Hpakant, as well as Hkamti.<sup>231</sup> It reinforces the point with a set of jade mining photos that all depict Hpakant and adds that "Sales of Jades and Gems for KBZ Group [are] US\$40-50 million each emporium; apart from record sales."<sup>232</sup> KBZ has decorated its bank branches with similar photos of jade mining operations in Hpakant, many of which were taken some years after it says it left the area.<sup>233</sup> According to a consultant to the company and also a senior jade industry figure, KBZ did this to demonstrate that its capital came from jade rather than drugs.<sup>234</sup>

## SALES THROUGH EMPORIUM

### Emporium

- Sponsored by the government
- 6 to 8 times a year since 1995
- 8,000 to 9,000 international jades and gems merchants attend each occasion
- Compete in tender and bidding processes;
- Sales proceeds after tax-deduction being deposited at State-owned Foreign Exchange Banks.

### Average earning

- Sales of Jades and Gems for KBZ Group is US\$ 40-50 millions each emporium; apart from record sales.

KBZ told Global Witness that it has not been involved in mining jade in Hpakant since 2003, instead operating two mines in Hkamti, Sagaing Division – an area considered much less productive than Hpakant. This seems inconsistent with a presentation given by KBZ itself in 2011 which indicates that, at that time, the group was still active in Hpakant and making sales worth US\$40-50 million at each jade and gems emporium.

## JADE MINE (PHARKANT)

A CLOSER LOOK AT  
KBZ Group



The 2011 presentation shows a series of images of large-scale jade mining operations – all of them taken in Hpakant...



#### 48<sup>th</sup> Emporium, 2011

Lot No	:	16754
Pieces	:	3
Weight(Kg)	:	112.80
Reserve Price (Euro)	:	3,380,000
Sales Price (Euro)	:	33,333,333

pictures of jade lots sold for massive amounts in different emporiums, including these three stones which sold for over 33 million euros in 2011...



and this picture of KBZ Chairman Aung Ko Win showing a large piece of jade to Myanmar President Thein Sein.

## KBZ and Ever Winner – just good friends?

*“KBZ is transparent in its dealings with all stakeholders”*

KBZ Code of Conduct<sup>235</sup>

According to a well-placed source in the jade business, KBZ boss Aung Ko Win has a long association with Ever Winner supremo Aike Htwe and has partnered with him in the jade business.<sup>236</sup> For its part, KBZ has told Global Witness that the company provided the start-up capital for Ever Winner, that Aike Htwe is a former ruby mines manager for KBZ and that he is a close friend of Aung Ko Win.<sup>237</sup> According to one of KBZ’s business partners, the two men also have a familial connection: Aung Ko Win’s nephew is the husband of Aike Htwe’s daughter Wai Wai Htwe.<sup>238</sup> KBZ denies this, however.

KBZ also denies that Aung Ko Win is a beneficial owner of Ever Winner but confirms what company records show: that Aike Htwe’s daughters are directors and shareholders of its new insurance company, IKBZ.<sup>239</sup> IKBZ’s other directors and shareholders are Aung Ko Win, his wife and their two daughters.<sup>240</sup> KBZ says that Aike Htwe is not a beneficial owner of the insurer.<sup>241</sup> However Aike Htwe’s daughter informed Global Witness that he is, in fact, an investor in IKBZ.<sup>242</sup>

What to make of all this? If Aike Htwe is a hidden owner of IKBZ, might Aung Ko Win in turn be a hidden owner of Ever Winner, or at least a partner in its astonishingly lucrative jade business? KBZ denies this.<sup>243</sup> But these rebuttals would carry more weight if both KBZ and Ever Winner published evidence of the beneficial ownership of each of their jade mining operations and of their relationship with one another.

## KBZ’s camouflaged partnership with the Myanmar army

KBZ has told Global Witness that it has “has never entered into business of any nature with MEHL and has no intention to do so.”<sup>244</sup> However, data from the June 2014 Myanmar Gems Emporium records that KBZ jade mining subsidiary Jing Hpaw Aung racked up US\$24 million in pre-tax jade sales and that all of these were made in partnership with Myanmar Imperial Jade Co. Ltd, which is a subsidiary of Myanma Economic Holdings Limited.<sup>245</sup> In a letter to Global Witness, MEHL confirmed that Jing Hpaw Aung is its partner in the jade business.<sup>246</sup>

## KBZ’s mining assessment plan and the need to go further and faster

KBZ’s advisors shared with Global Witness an outline of a proposed internal assessment of KBZ’s mining portfolio. Encouragingly, this suggests that the company may, in the future, disclose information about mine locations, mining activities and ownership share, as well as land acquisition.<sup>247</sup>

Global Witness believes that if KBZ wants to live up to its rhetoric on transparency it needs to go much further and faster, however. In meetings with top KBZ managers and also in writing, we have suggested that the Group makes an immediate disclosure of data covered by the EITI standard such as:

- location, type and duration of the jade mining licences KBZ holds;
- the beneficial owners of KBZ’s jade mine ventures and their level of ownership;
- payments to the government over the past year, regarding each KBZ jade mining concession;
- total production volumes and the value of production from each of KBZ’s jade mines;
- details of the contracts between KBZ and the government to mine jade; and
- arrangements KBZ has with state-owned enterprises such as Myanmar Gems Enterprise and MEHL.

### 3. Asiaworld

Asiaworld, another of Myanmar's largest companies, was established by Kokang drug lord Lo Hsing-Han and his son, Steven Law, who currently runs the business and is on the US sanctions list.<sup>248</sup>

Asiaworld is widely reported to have had close relations with senior State Peace and Development Council (SPDC) generals, including Than Shwe, his number two Maung Aye and Tin Aung Myint Oo, who later served as vice president in the post-2011 Thein Sein government.<sup>249</sup>

In Kachin State, Asiaworld is best known for its role as a partner in the controversial Myitsone Dam hydropower project which President Thein Sein suspended in 2011.<sup>250</sup> However, recent research by Global Witness shows it also operates a major jade mining company in Hpakant called Yadanar Taung Tann Gems which, according to official figures, notched up pre-tax jade sales of US\$27 million in 2014 and US\$21 million the previous year.<sup>251</sup>

#### Mr Asiaworld's jade mines

During a review of company records retrieved in October 2014, Global Witness noticed that Steven Law – under his Burmese and Chinese names Htun Myint Naing and Lo Ping Zhong – was listed as managing director and shareholder of Yadanar Taung Tann, alongside another director named 'Mr Asiaworld'.<sup>252</sup> In February 2015 we wrote to Steven Law, to request a meeting about the potential for making the jade business more transparent through EITI. Mr Law did not reply and, as of September 2015, the names Htun Myint Naing and Lo Ping Zhong had been removed from the company registry entry for Yadanar Taung Tann.<sup>253</sup>

It was in the guise of Lo Ping Zhong of Yadanar Taung Tann Gems, however, that Steven Law gained entry to Canada as part of a Burmese government trade delegation in June 2014.<sup>254</sup> A Canadian government spokesman subsequently



Steven Law, the son of Kokang drug lord Lo Hsing-Han, currently runs one of Myanmar's largest conglomerates, Asiaworld, and controls jade mines through the Yadanar Taung Tann Gems company. He is on the US sanctions list and Asiaworld is widely reported to have had close relationships with senior figures from the military junta, including former dictator Than Shwe, his number two Maung Aye and Tin Aung Myint Oo, who later became vice president.

commented that "Canadian immigration officials failed to do their job properly screening this individual under our immigration laws".<sup>255</sup>

Yadanar Taung Tann has a large jade mine at Met Lin Chaung (#2), west of Hpakant Town.<sup>256</sup> Two well-informed sources told Global Witness that the company also has jade mines in the Gwi Hka area south of Hpakant.<sup>257</sup> Official maps lend weight to this claim, showing that Gwi Hka Joint Venture (#7) is held by Dagon Yadanar Gems Co. Ltd, a firm controlled by two of Yadanar Taung Tann's directors.<sup>258</sup> One of these two directors, Law Sni Chant, has a six digit NRC number that is the same as Steven Law's aside from the final two numbers.<sup>259</sup> The similarities in name and NRC number could indicate a familial relationship; however Steven Law declined to respond to written questions on this and other aspects of his jade business.

## An unholy trinity

An associate of Lo Hsing-Han told Global Witness that Steven Law originally obtained Yadanar Taung Tann's Gwi Hka mines through a partnership with army firm Myanmar Economic Holdings Limited and that this brought the company into conflict with the KIA/KIO, which has historically regarded Gwi Hka as its sphere of influence.<sup>260</sup> The dispute was resolved via a meeting at the KIA/KIO HQ in Laiza between Steven Law and KIA General N'ban La. Steven Law offered to involve the KIA/KIO in Asiaworld's jade mining ventures and N'ban La accepted, although whether he did so on behalf of the KIA/KIO or in a personal capacity is unclear.<sup>261</sup> The General did not respond to a request for comment on this point.

Either way the outcome appears to have been a three way partnership between a Myanmar army company, a 'crony' firm likely founded on drug money and a leader of the KIA/KIO. This illustrates well how battlefield enemies have found common cause in exploiting Kachin State's jade.

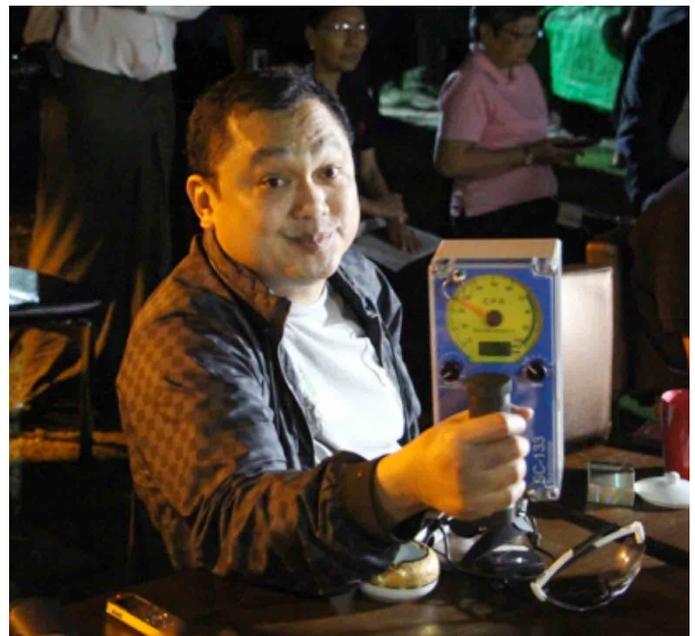
## 4. Htoo Group – an unlikely transparency trailblazer?

Another noteworthy crony business with a hefty stake in jade is the Htoo Group, which recorded pre-tax sales of US\$13 million at the 2014 Myanmar Gems Emporium.<sup>262</sup>

Htoo Group's colourful boss, Tay Za, has been trying to shake the label of Myanmar's 'number one crony businessman' for years.<sup>263</sup> Subject to international financial sanctions since 2004, he has been described by the United States government as "an arms dealer and financial henchman of Burma's repressive junta", whose Htoo Group "carries out key projects on behalf of the Burmese junta, including the purchase of military equipment and aircraft for the Burmese military".<sup>264</sup> Links to military and ruling party figures have also been cited as a basis for sanctions, including his business association with Aung Thein Mann, son of Thura Shwe Mann, the third highest ranking figure in the former military government and current Speaker of Parliament.<sup>265</sup>



KIA/KIO General N'ban La became involved in Yadanar Taung Tann's Gwi Hka jade mines as part of a deal made with Asiaworld boss Steven Law. The nature of this agreement and the question of whether General N'ban La took a stake in these ventures, either in a personal capacity or on behalf of the KIA/KIO, remains unclear. Global Witness' efforts to obtain a comment from the General on this point have so far been unsuccessful.



'Number one crony' Tay Za built his business empire through connections with the military junta, and has been subject to US sanctions for years. He is said to have a personal penchant for jade and, until last year, he chaired the Myanmar Gems and Jewellery Entrepreneurs Association.

Despite attempts by Tay Za's circle to refute the claims against him and the Htoo Group, the sanctions remain in place.<sup>266</sup> He is now said to be suffering financially, and there are rumours that he has been selling off jade business ventures to "Wa companies" (Wa involvement in jade is the subject of the next section).<sup>267</sup> Company representatives have denied that there have been any such sell-offs, however.<sup>268</sup>

Htoo Group's jade mining activities have attracted a good deal of criticism from others in the business and people living in Hpakant. The company is accused of tipping off MEHL when other concessionaires discovered valuable jade deposits; thereby paving the way for the army company to muscle in on the mines.<sup>269</sup> Locals also describe how Htoo relocated the village of Tawng Kaw so that it could slice in half the hill it was perched on and access the jade within. The remodelled hill is now known locally as "Htoo Kabar" (Htoo Cliff).<sup>270</sup> Global Witness has put these allegations to Htoo Group but has not received a response.



The Htoo Group has provided to Global Witness detailed information on its jade mining operations in Hpakant, including the sales revenues generated and taxes paid in relation to each of its mines. This shows that it is perfectly possible for jade companies to disclose data, broken down by project, on their mining and trading activities. If Tay Za can do it, why not the other major players in the business? CREDIT: Htoo Group

Now, however, the Htoo Group has pledged to support reforms of the jade sector. To demonstrate its commitment to the EITI, the conglomerate provided Global Witness with details of its jade joint ventures, mine locations and 2014 sales and tax payments, broken down by project.<sup>271</sup> This sets an important precedent for other players in the country's most opaque sector and shows that concerns that leading jade companies cannot or will not comply with EITI standards are misplaced.

## Ceasefire Groups

Following decades of armed opposition from Myanmar's many ethnic minority groups, the military government negotiated a series of ceasefires from 1989 to 1995. The so-called 'ceasefire groups' were rewarded with access to valuable business opportunities including jade concessions in Kachin State.<sup>272</sup> Two of these are particularly significant to efforts to reform the jade business: the United Wa State Army / United Wa State Party and the Pa-O National Organisation.

### 1. United Wa State Army / United Wa State Party

The United Wa State Army (UWSA) / United Wa State Party (UWSP) have been heavyweights in the jade business since the early 1990s. Evidence gathered by Global Witness suggests that the ultimate boss of the Wa-associated jade companies that now operate in Hpakant is drug lord Wei Hsueh Kang, the former financial affairs chief for the UWSA/UWSP. The US government has offered a reward of up to US\$2 million for information leading to his arrest or conviction and imposed sanctions on him, his associates and his companies.

**Narcotics Rewards Program: Wei Hsueh-Kang**

BUREAU OF INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT AFFAIRS

**WANTED**



(Alias: Prasit Chivinnitipanya)  
**Date of Birth:** 5/29/52  
**Place of Birth:** China  
**Height:** 5'6" **Weight:** 125 lbs  
**Eyes:** Brown **Hair:** Black  
**Race:** Asian **Nationality:** Chinese

**Wei Hsueh-Kang**, the commander of the United WA State Army's (UWSA or WA) Southern Military Command, is wanted on Federal drug violations in the Eastern District of New York. The WA is currently the dominant heroin trafficking group in Southeast Asia, and possibly worldwide. Wei Hsueh-Kang is believed to be in hiding in Burma.

The U.S. Department of State is offering a **REWARD OF UP TO \$2 MILLION** for information leading to the arrest or conviction in the United States of Wei Hsueh-Kang.

If you have information, and you are outside the United States, please contact the nearest U.S. Embassy or Consulate. In the United States, please contact the DEA, FBI, or ICE office in your city.

**ALL IDENTITIES ARE KEPT STRICTLY CONFIDENTIAL**

Both Wei Hsueh Kang and the UWSA/UWSP are subject to US sanctions and indictments for drugs trafficking. Today, Wei Hsueh Kang is behind a web of powerful jade companies which operate in Hpakant using the Wa name.

One outstanding question is whether Wei Hsueh Kang and his associates currently control these jade ventures on behalf of the UWSA/UWSP, in an entirely personal capacity, or somewhere in between. This is hard to gauge, although long-time observers of Wa State suggest that its leaders still work hand in glove with Wei Hsueh Kang, even though they now seek to downplay his role within the UWSA/UWSP leadership.<sup>273</sup>

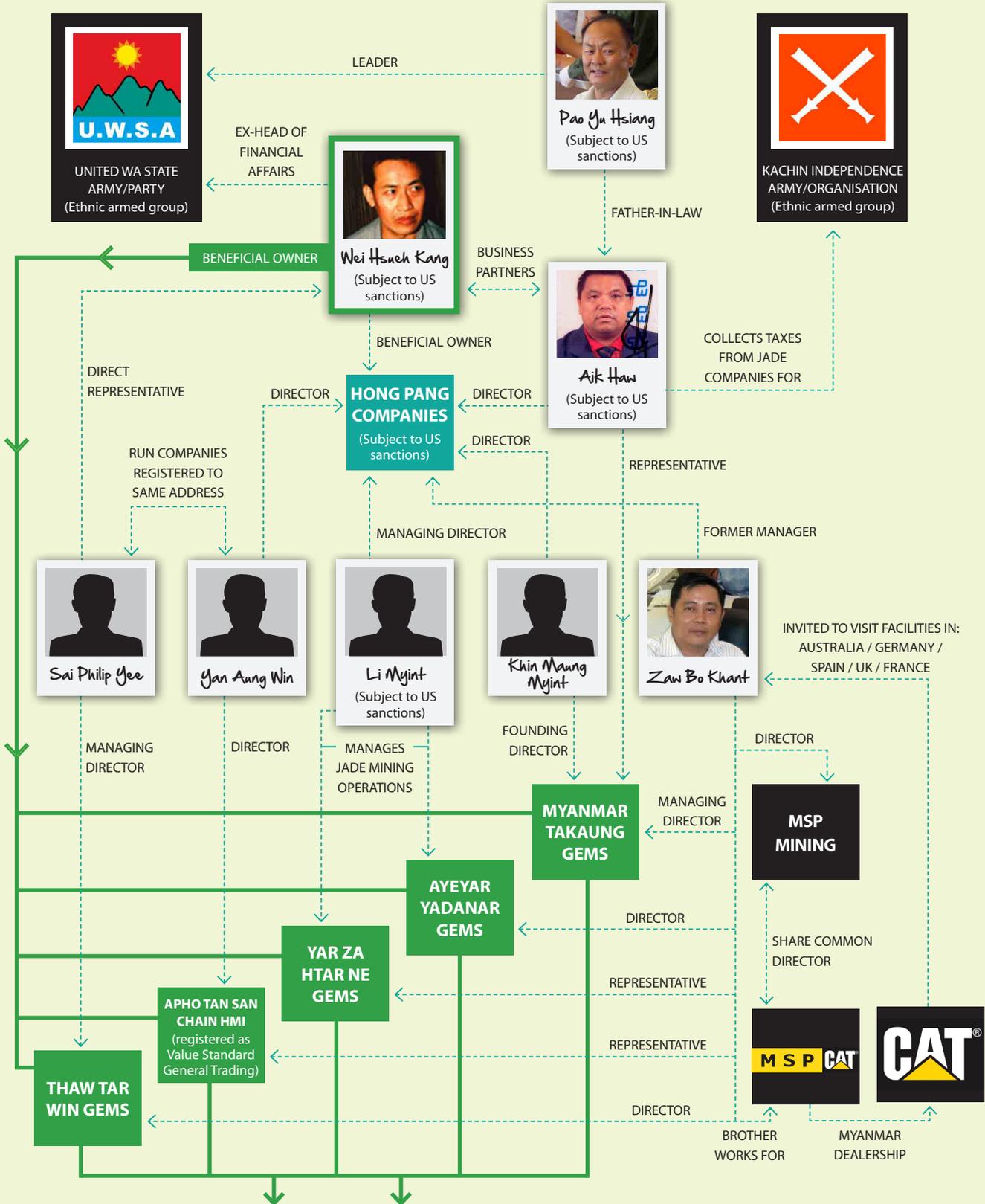
What is clear, however, is that this group of jade companies exploits the fact that it is believed to represent the UWSA/UWSP, whom neither the Tatmadaw nor the KIA/KIO wish to antagonise.<sup>274</sup> Using the Wa name, it has mastered the mafia-style landscape of Hpakant to become exceptionally powerful.

The following is a summary of a longer background paper on the Wa-associated jade companies that will be published separately to this report.



Representing the Wa ethnic group, the UWSA/UWSP administers Myanmar's largest ceasefire zone, located in Shan State on the China border. The UWSA/UWSP has been granted an unparalleled level of autonomy, and it is the largest and most well-equipped non-state armed group in Myanmar, with an estimated 20,000-30,000 regular troops and up to 50,000 reserves.

Narcotics kingpin Wei Hsueh Kang's jade business network



These five companies collectively control over 50 jade mines.

**Their combined pre-tax sales across the 2013 and 2014 Myanmar Gems Emporiums topped US\$100 million, according to official figures. This does not include the much larger amounts they are alleged to have smuggled.**

**NOTE:** Directorships reflect listings in the DICA company registry as of October 2015. More complete DICA records from October 2014 indicate that directors are also shareholders. According to one Hong Pang group director, the Hong Pang companies are no longer active. They are still listed, however.

## Perpetual evolution – the shape-shifting Wa-associated jade businesses

*“If one company name is destroyed, the people behind it stay the same and they use another name.”*

Jade businessman on the Wa-associated jade companies<sup>275</sup>

Originally the main UWSA/UWSP-associated company mining jade in Hpakant was Wei Hsueh Kang’s Hong Pang.<sup>276</sup> But as US government pressure increased on Wei’s businesses, the Hong Pang brand was shelved.<sup>277</sup> What happened next? Global Witness has reviewed a range of documents and gathered testimony from a wide range of well-informed sources that lead us to the following conclusions:<sup>278</sup>

- Hong Pang’s jade business has effectively morphed into jade mining operations in Hpakant run by the company Myanmar Takaung in conjunction with four other licensed mining firms: Ayeyar Yadanar, Yar Za Htar Ne, Thaw Tar Win and Apho Tan San Chain Hmi (registered under its English name Value Standard). Listed or former Hong Pang directors and managers are instrumental in the running of all five companies.<sup>279</sup>
- These five companies carry out jade mining operations together and can be regarded as part of the same business group.<sup>280</sup>
- Wei Hsueh Kang is a beneficial owner of the jade mining ventures of the five companies and exercises ultimate control over them.<sup>281</sup>
- This group of five companies may represent the business interests of the UWSA/UWSP.<sup>282</sup>

Below Wei Hsueh Kang, the key players overseeing this group of jade mining companies are Aik Haw, the son-in-law of UWSA/UWSP supremo Pao Yu Hsiang, Zaw Bo Khant, a director or representative of all five firms, and Li Myint.<sup>283</sup> All three previously worked with the Hong Pang Group.<sup>284</sup> Aik Haw and Li Myint are subject to US sanctions for narcotics-related business activities.<sup>285</sup>

## An expanding share of the pie

*“We can take all the jade from Hpakant within three years.”*

Myanmar Takaung company representative<sup>286</sup>



Dump trucks from the Myanmar Takaung company in Gwi Hka, Hpakant, tipping waste which jade hand pickers then search through. Myanmar Takaung and its associated companies have become very powerful players in Hpakant; controlling at least 50 mines. CREDIT: Minzayar

An official document seen by Global Witness details 49 mines controlled by Myanmar Takaung and its associated companies.<sup>287</sup> But we have gathered additional information that suggests this tally is too low, as the UWSA/UWSP-associated companies have moved into other mines, including at least one licensed to Tay Za’s Htoo Group.<sup>288</sup>

Alongside the expansion of their portfolio of jade mines, the top dog status of the UWSA/UWSP-associated companies is visibly reflected in their fleet of 40 giant Komatsu PC2000 backhoe diggers, which cost US\$80 million and matches that of Ever Winner.<sup>289</sup> These machines are described by one jade businessman as looking “like a two storey building”.<sup>290</sup>

While the UWSA/UWSP-associated companies have spent heavily on machinery for digging jade, they do not appear to have invested in systems to dispose of the tailings safely. Twice in March 2015,

a 500 foot high tailings dump built up by Yar Za Htar Ne and the Aung Hein Min company in the Sik Mu / Seng Tawng area collapsed. Accounts from

local residents and media suggest that dozens may have been killed.<sup>291</sup>



Myanmar Takaung and its associated companies operate not only in their own mines, but also in those licensed to other companies. Here Myanmar Takaung works the Kaday (#3) mine licensed to Tay Za's Htoo Group.

“A gangster group doing black business”<sup>292</sup>

*“The Wa use money, power and weapons; they even kill people. Local people cannot confront them.”*

Jade businessman<sup>293</sup>

Apart from the scale of their assets and operations, the main distinguishing feature of the Wa-associated companies is the way in which they are able to invoke the UWSA/UWSP name and its unique strategic position to bend other companies to their will. The tactics they are reported to use are straight out of a gangster’s playbook and include the following:

- Offering companies the protection of the UWSA/UWSP name in exchange for payment or a share of production.<sup>294</sup> This protection option has reportedly been taken up not only by smaller firms but also big names such as Myanmar Naing Group, the firm controlled by sons of Than Shwe, and Yadanar Taung Tan, run by Asiaworld tycoon Steven Law.<sup>295</sup>
- Coercing other businesses into coming under the UWSA/UWSP umbrella by blocking road access to their mines.<sup>296</sup>
- Making threats: these include less than subtle references to how UWSA/UWSP company representatives have had people killed in the past.<sup>297</sup>
- Using law suits to harass other businesses whom they accuse of stealing their jade.<sup>298</sup>



UWSA/UWSP supremo Pao Yu Hsiang. The Wa-associated jade mining companies in Hpakant operate like a protection racket; using the UWSA/UWSP name to bully other firms into making business deals with them.

## 2. Ruby Dragon

The UWSA/UWSP is the biggest but not the only ceasefire group in Hpakant. After the Pa-O National Organisation (PNO) laid down arms in 1991, the government awarded valuable gemstone mining concessions to the Pa-O company group Ruby Dragon.<sup>299</sup>

Over the years, the Ruby Dragon Group has become a prominent player in the jade and ruby industries. In 2000, it became one of the first companies to enter into a joint venture with the Ministry of Mines to mine jade, and it subsequently hit the headlines when it discovered the world's biggest ever jade boulder – a whopping 3,000 tonne stone which it gifted to Myanmar's military junta.<sup>300</sup>

The group has diversified from its gemstone origins to a range of other sectors; from wine making and agriculture to manufacturing and hospitality, with some of its companies now featuring in Myanmar's top taxpayer lists.<sup>301</sup>

Its gemstone interests continue to provide a significant revenue stream, however. Ruby Dragon Group companies and joint ventures recorded pre-tax jade sales in excess of US\$58 million at the 2014 Myanmar Gems Emporium and US\$46 million the previous year.<sup>302</sup>

## Business meets politics

For the PNO, business and politics are closely linked. The Ruby Dragon Group has stated to Global Witness that "funds from [its] jade, jewellery and mining businesses [go] to the PNO and development of the [Pa-O] region".<sup>303</sup>

The Ruby Dragon Chairman, Nay Win Tun, was formerly responsible for "special economic affairs" for the Pa-O, and in the 2010 parliamentary elections he ran unopposed as a PNO candidate and secured a seat in the *Amyotha Hluttaw* (the upper house of parliament).<sup>304</sup>

Global Witness' research indicates that the Chairman of the Pa-O Self-Administered Zone, Saw Lwin, and another PNO parliamentary representative, Khin Thein Pe, also hold directorships of various companies, in some cases alongside Nay Win Tun.<sup>305</sup>

During his parliamentary term, the Ruby Dragon chairman has taken a leading role in the ongoing revisions to the laws which govern Myanmar's jade industry. As chair of the *Amyotha Hluttaw* committee on natural resources and environmental conservation, he has had a front row seat in closed door negotiations over new mining and gemstone laws.<sup>306</sup>

Effectively, this means that a prominent industry player is involved in setting the rules which will regulate his own business. This typifies a wider problem of conflicts of interest affecting Myanmar's legislature, which undermines the chances of it producing laws and regulations which truly serve the public interest.



The chairman of the Ruby Dragon Group, Nay Win Tun, has also headed the parliamentary committee responsible for revising Myanmar's mining and gemstone laws. Addressing conflicts of interest of this kind is critical to building public trust in the legislature and ensuring that new laws and regulations best serve the interests of ordinary people in Myanmar.

## What would you do with the world's biggest block of jade?

In December 2000, the Ruby Dragon Group made the record-breaking discovery of a 3,000 tonne block of jade from its operations in the famed Nam Maw area of Hpakant.<sup>307</sup>

The find was described by the company as being "of the best imperial jade quality. A world record indeed, in size and value".<sup>308</sup>

On 26 May 2002, the jade block was donated to the government in a formal ceremony involving Lieutenant-General Khin Nyunt, then head of the Military Intelligence Service and the primary architect of the ceasefires with ethnic armed groups such as the PNO and the UWSA/UWSP.<sup>309</sup>

The speech Khin Nyunt made at the handover ceremony shows just how Kachin State's valuable jade was used to further the Myanmar government's political agenda:



*"The Union of Myanmar is a nation at which other nations are casting a covetous eye, as it is world-famous for its inexhaustible precious gems. When the Tatmadaw started to assume the duty of the State, it has, with the spirit of solidarity and unity, invited in all the national organisations which were launching armed opposition against the state; as a result, 17 nationalities' armed groups have returned to the legal fold... The Government has... seen to it that they are able to do business. Arrangements have been made to enable the national organisations to do business such as gems mining. As the national organisations have worked hard with the aim of serving the interests of the people and the state, their business has become successful."*<sup>310</sup>

## International companies

The “new” Myanmar is open for business. For multinational powerhouses with few fresh markets left to tap, the opportunities are obvious. But for household names with reputations to defend, there are major risks too. The dangers posed by the secrecy and abuse that currently pervades Myanmar’s jade sector are highlighted by the recent experiences of two of the US’ biggest names – Coca-Cola and Caterpillar. Their unwitting links to some of the most notorious of the companies featured in this report underline the need for greater openness regarding company ownership in Myanmar and beyond.

### 1. The real thing – MEHL and Coke’s shared partner

When the Coca-Cola Company established itself in Myanmar in 2013, it spent “a seven figure” sum hiring prominent firms including Kroll and PWC to carry out due diligence on its prospective partner and director, Daw Shwe Cynn, the head of a Myanmar soft drinks company called Pinya Manufacturing.<sup>311</sup>

This was the right thing to do. Yet seemingly no one picked up that Daw Shwe Cynn is a 20% shareholder in Xie Family, a prominent jade mining company and long-time contractor for Myanma Economic Holdings Limited.<sup>312</sup> She is also a director and the majority shareholder in one of Myanmar’s biggest jade trading firms, Gold Uni, which she runs with her husband U Chaow. Gold Uni company is listed on government maps as holding the jade mine Gwi Hka (#27) just south of Hpakant.<sup>313</sup> According to Chinese media reports and industry sources, the firm was investigated by the Chinese authorities as part of a crackdown on jade smuggling in 2010-11.<sup>314</sup>

Involvement in jade should be a big red flag, given the corruption, military involvement and environmental and human rights abuses, and the fact that Myanmar jade and key players in the business, including MEHL, are still subject to US sanctions.<sup>315</sup>

Xie Family’s links to MEHL go back to 1995 when it became a primary jade mining contractor to the military firm.<sup>316</sup> A MEHL annual report shows that by 2002 Xie Family operations accounted for 98% of jade stocks from the army company’s mines.<sup>317</sup> The same document records Xie Family making “supervision charges” to the Tatmadaw Northern Command in Kachin State.<sup>318</sup> An MEHL annual report covering the year 2007-2008 lists Xie Family in a table of “MEHL-Owned Businesses”.<sup>319</sup>



This stone marker on the bridge on the road to Hpakant states that the bridge was built by MEHL and Xie Family. The business relationship between the two companies dates back to 1995.

MEHL’s jade division, Myanmar Imperial Jade, told Global Witness that it no longer worked with Xie Family and Daw Shwe Cynn and U Chaow said that Xie Family has not had a mining contract with MEHL since 2012.<sup>320</sup> However, it appears that the two companies have continued trading together: Myanmar Gems Emporium figures for 2014 describe the two companies jointly selling jade worth over five million euros.<sup>321</sup> Aside from its dealings with MEHL, official maps show that Xie Family holds a joint venture mine with Myanmar Gems Enterprise in Hpakant.<sup>322</sup> According to U Chaow the company holds several other mining licences.<sup>323</sup>

In a letter to Global Witness, Daw Shwe Cynn said that her role in Xie Family is as a non-executive director and minority shareholder and that she is not involved in the day to day running of the company.

She said she acquired the 20% stake in the firm in 2009 as security against a substantial debt that Xie Family still owes to U Chaow. This relates to a loan that U Chaow extended to Xie Family for purchase of equipment in 1995 – the period when it was first incorporated and began partnering with MEHL. As regards Gold Uni, Daw Shwe Cynn wrote that the company has a licence to mine in the Maw La Kin area in a joint venture with the Ministry of Mines. She denies that Gold Uni has been investigated by the Chinese authorities.

Where does this leave Coca-Cola? Trade in jade is subject to US sanctions and so is MEHL. But joint ventures with jade company owners or MEHL contractors are not. No laws were broken; still, Coca-Cola's indirect connection with Xie Family and MEHL puts the onus on the multinational to use its considerable influence with its partner to encourage greater accountability in the murky jade business.

Global Witness has been in discussions with Coca-Cola for several months about what steps it can take. On the back of these communications, the company published the names of the directors and shareholders of its local subsidiary, and disclosed information on the Xie Family connection as part of the report it submitted under the US Reporting Requirements in June 2015.<sup>324</sup>

This represented a good start, but the report does not address certain critical issues. It lists the shareholders of its subsidiary in Myanmar as being two companies – Coca-Cola Myanmar Overseas Holding Pte. Ltd and Pinya Manufacturing – but provides no details on the identities of the beneficial owners of these firms and what their other business interests and connections are. Coca-Cola also did not report on the fact that Xie Family has had a long-standing partnership with MEHL.

Global Witness asked Coca-Cola in a letter in August this year who are the ultimate beneficial owners of Coca-Cola Myanmar Overseas Holding Pte. Ltd and Pinya Manufacturing. Coke did not answer this question.<sup>325</sup> The company did say, however, that "The Coca-Cola Company has been transparent about our joint venture and operations in Myanmar and we continue to go above and beyond the Department of State's Reporting Requirements

on Responsible Investment in Burma."<sup>326</sup> Meanwhile, at Global Witness' request, Coca-Cola facilitated a dialogue between Global Witness and Daw Shwe Cynn. This enabled Global Witness to put a proposal directly to Xie Family that it make early disclosures of information about its jade mining activities in line with EITI, including details of the volumes of jade it produces, its payments to the government and any arrangements with state-owned enterprises including army companies. Daw Shwe Cynn's 20% stake in Xie Family and her husband's role as a key company creditor would appear to give her a strong platform for demanding the company start being more transparent.<sup>327</sup> She stressed in her letter, however, that "my minority shareholding in Xie Family is atypical and does not allow me any influence over [its] business".

After months of written correspondence and two face to face meetings with Daw Shwe Cynn, there is little to suggest that Xie Family is willing to edge out of the shadows and play a constructive role in reforming the jade business. The contrast between the image of positive global modernity expounded by Coca-Cola and the sordid, secretive character of the jade sector is as stark as ever.

In July Coca-Cola commented that "We hope that Global Witness... is willing to play a role to work with related parties in Myanmar to bring about positive and long-lasting change in the country."<sup>328</sup> But how does the company see its own role? Coca-Cola has been handed the opportunity to turn a potential public relations disaster into a showcase for its commitment to responsible business practices. However its professed efforts to use its influence to push for better practices in its partner's jade business have yielded nothing tangible. Is the company that once exhorted the world to "make it real" hoping the issue will simply go away?<sup>329</sup>

Clearly, Coca-Cola's fingers have been burnt, but this episode is just a symptom of a much deeper problem. The company's experiences show why Global Witness is calling for more robust due diligence and public reporting by international companies. Likewise, investors should publish the names and identifying information of the individuals who own and control their in-country ventures, together with information on these people's other business interests and any political or military connections.

## 2. Travels with my CAT, by Zaw Bo Khant

Global Witness' investigations into the web of companies associated with drug lord Wei Hsueh Kang and the UWSA/UWSP turned up an unexpected connection in the form of US machinery giant, Caterpillar Inc.

Zaw Bo Khant is the managing director of Myanmar Takaung, the pivot for a group of jade mining companies Global Witness believes to be controlled by Wei Hsueh Kang and which are profiled in the previous section of this report. He is also the director and shareholder of Myan Shwe Pyi Mining, whose associated company Myan Shwe Pyi Tractors describes itself as "Myanmar's premier Caterpillar dealership" and uses the branding MSP CAT.<sup>330</sup> Zaw Bo Khant's brother is one of Myan Shwe Pyi's customer service managers.<sup>331</sup>

Since 2011, Zaw Bo Khant has been hosted at Caterpillar facilities around the world, including:



The United Kingdom<sup>334</sup>



Germany<sup>335</sup>



Australia<sup>332</sup>



France<sup>336</sup>



Spain<sup>333</sup>



... And along the way, found time for sightseeing, champagne on the Eiffel Tower, Rolex shopping and several rounds of golf.<sup>337</sup>

Caterpillar Inc. has stated to Global Witness that, as far as it is aware, any business courtesies provided to Zaw Bo Khant during his visits to Caterpillar facilities are in line with the company's Code of Conduct which prohibits bribes, kickbacks or any other measure which is unethical or which would tarnish Caterpillar's "reputation for honesty or integrity".<sup>338</sup> In addition, Caterpillar Inc. has said that whilst it cannot monitor the use of every piece of its equipment around the world, it expects customers to use its products in a responsible, lawful and productive manner.<sup>339</sup>

The US giant has further explained that it primarily sells its products through independent dealers. In line with its Code of Conduct, it carries out "robust screening procedures to ensure that its transactions do not violate relevant export control laws".<sup>340</sup> It emphasises that neither Zaw Bo Khant nor Myanmar Takaung feature on US sanctions lists, and goes on to state that Caterpillar Inc.'s due diligence has not demonstrated that companies named by Global Witness are owned or controlled by "a sanctioned party".<sup>341</sup>

Caterpillar Inc.'s unwillingness to take the information provided to it by Global Witness more seriously is both disappointing and short-sighted. As explained above, there is strong evidence that Wei Hsueh Kang and his associates have used an array of front companies precisely in order to avoid US sanctions and indictments. As such, there is a good reason why the 'public faces' of UWSA/UWSP-linked companies will not be on current US sanctions lists. Moreover, Zaw Bo Khant's previous role as manager for Wei Hsueh

Kang's Hong Pang companies is well known and should be grounds enough for a responsible company to make further enquiries.<sup>342</sup>

The international firms which make and supply machinery to mining operations in Hpakant risk causing serious harm to local people by building relationships with the wrong mining companies. In these circumstances, the onus is on manufacturers to be completely transparent regarding who they are doing business with. They should be proactively seeking information on their local partners and other associates, rather than simply referencing the US sanctions list as a tick-box exercise.

The US government has recognised the particular risks facing western companies looking to invest in Myanmar, and US companies are therefore required to publish information on their business activities and their approach to corruption, human rights, environmental and other risks.<sup>343</sup>

These requirements do not currently apply to companies which operate through, for example, independent dealerships, but Global Witness asked Caterpillar Inc. if it could produce a report in line with the designated standards on a voluntary basis.<sup>344</sup> Unfortunately, the company takes the view that as "There is no current obligation for Caterpillar to file such a report... Caterpillar does not intend to file such a report."<sup>345</sup> This suggests that the US government will need to expand its reporting requirements if companies like Caterpillar Inc. are to take a more responsible approach.



The big jade players are spending millions of dollars apiece on huge machines from international suppliers to carry out large-scale exploitation. This highlights the globalised dimension of the jade industry, and raises questions for machine companies like Caterpillar Inc. – do they really know who they are doing business with? CREDIT: Minzayar

## CHAPTER 3: WHO'S LOSING OUT?

The impact of the jade trade's expansion and capture by Myanmar's elites has been devastating for the people of Kachin State, who have been robbed of their natural inheritance. Within the mining region of Hpakant itself, it has created a dystopian wasteland in which the local population grapples with environmental and social collapse on a daily basis.

The consequence is a palpable sense of anger against the big companies which rake in the benefits at the expense of local people, as well as the Nay Pyi Taw authorities that license them to operate.

This in turn feeds into support for a harder line stance against the Myanmar government in the context of the armed conflict in Kachin State, an issue which is examined in the next chapter.

At the same time, many are using peaceful means to call for change. Last year just under 5,000 residents of Hpakant signed a letter to President Thein Sein setting out their concerns over the exclusion of local people from the jade business, and the irresponsible and short-term approach to mining taken by licensed companies.<sup>346</sup> In November 2014, 2,000 people took to the streets to protest against the killing of a local miner by an employee of one of the big companies.<sup>347</sup> It is now up to the government to show that it is willing to listen, and to start addressing the issues that local people are raising.

### A call for change from Kachin State

In October 2014, 4,923 people in the jade mining township of Hpakant signed a letter to President Thein Sein demanding an end to the abuses by jade mining companies. The letter details devastating environmental and social impacts caused by company activities:

*"As part of jade mining activities in Hpakant, a limited number of capitalists have been granted permits for blocks, whereas local ethnic groups have been granted no jade blocks. Although certain companies are affiliated to ethnic groups, such affiliation is in title only and these companies are dominated by foreign nationals."*

*"The mining companies are dynamiting the hills and mountains to allow exploration activities prior to the expiry of their contracts, and they are acting solely for their own benefit in the excavation of valuable jade via short-term rather than long-term processes. This poses a serious potential health hazard to residents, and causes a wide range of diseases or fatalities."*

*"Companies do not systematically stabilise sites where they have undertaken deep excavations and created reservoirs. As a result, heavy rains cause reservoirs to burst, and reservoirs are also sometimes destroyed intentionally, leading to the death of cattle and loss of property. However, the companies never take responsibility for such incidents."*

*"The huge vehicles used by the companies have left the streets congested, and accidents are frequent."*

*"Although valuable resources, priceless gems, forests, and gold are all vanishing due to excavations by companies equipped with machinery, the public does not benefit from these activities. Conversely, people are suffering as a result of health hazards and are even dying due to the air pollution created by the dynamite mining of the companies."*

*"Issuing grants to these companies to work on blocks will lead to a rapid decline in the state of local residents' properties as well as the region's valuable jade, leading to serious repercussions for the next generation."*

*"The tree is in our garden but we are not allowed to eat the fruit"*

Jade businessman<sup>348</sup>



In November 2014 around 2,000 miners and local inhabitants of Hpakant took to the streets to signal their opposition to the way the jade business is currently managed. CREDIT: KDNG



## Kachin's stolen inheritance

Discuss jade with a Kachin and they invariably hark back to the old days, when families could draw on Hpakant's natural riches to build homes and make their livelihoods. However, since the military junta parcelled the jade mines out in the early 1990s, the industry has gone from a small-scale business in which many local miners could participate to one run by government-approved companies who are often backed up by military force.<sup>349</sup> In the words of one church leader, "The native people are voiceless. After the ceasefires, companies were brought in by the authorities but they showed no respect for local people's rights".<sup>350</sup>

The few Kachin companies licensed to mine jade compete against bigger players, described by one former jade trader as having "deep pockets and

lots of power".<sup>351</sup> Some smaller-scale Kachin miners have become "workers on their own land"; but in fact many licensed companies prefer to employ workers from other states and divisions, leading many locals to move to other regions or even overseas to look for work.<sup>352</sup>

Government regulations restricting transportation routes and cutting and polishing activities mean that the mere possession of valuable jade by people in Kachin State is, in most cases, a criminal act.<sup>353</sup> This gives rise to the perception that "the government doesn't want Kachin people to become rich; Kachins are discriminated against when it comes to the jade trade".<sup>354</sup> In June 2014, following intensive lobbying by local jade businessmen, a market for jade and amber was formally opened in Myitkyina.<sup>355</sup> While a step in the right direction, the market is only allowed to sell the lowest grade jade, and handling and trade of raw commercial or imperial grade jade in Kachin State remains illegal.



Today, ethnic Kachin are largely left out in the cold whilst jade concessions go to "big companies... controlled by lowlanders, not locals... which represent the military, cronies and elite groups..." The Kachin who remain in the business are largely relegated to digging through the waste left by licensed mining companies. CREDIT: Minzayar

On the massive revenues from jade, the big questions are “where is Kachin’s share?”, and “where is the money really going?”. One community leader explained that “... now there is no transparency,

there is no discussion about jade and about sharing resources. We need transparency and therefore trust between Kachin State and the central government.”<sup>356</sup>

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*“Fair and unfair – forget about it! As long as this policy of 50 years stands, how can we talk about fair?”*

Kachin businessman<sup>357</sup>

*“Now there is no transparency, there is no discussion about jade and sharing resources. We need transparency and therefore trust between Kachin State and the central government.”*

Kachin community leader<sup>358</sup>

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A jade miner on his way to a mining site in Hpakant. As one Kachin community leader explained, after the ‘big companies’ arrived, most local people lost their jobs in the mining business: “Young people cannot make any money from mining, so there is a kind of ‘brain drain’. They go to other states and divisions or even overseas to find work. So there is a waste not only of natural resources but of human resources too.” CREDIT: Minzayar

These grievances have been compounded by the massive upswing in jade extraction by licensed companies over the past year. Fears are now

widespread that with “jade mountains going day by day” soon “all the jade will be gone”, leaving nothing for future generations of Kachin State.<sup>359</sup>



A truck stuck on the muddy road to Hpakant, waiting to be dragged out by elephants. As a Kachin community leader explained: "Huge amounts of precious jade have been mined in Hpakant over decades and yet in Kachin State there are insufficient schools and supply of electricity, and the roads are in very poor condition." CREDIT: Minzayar



A small-scale miner inspects a stone he has found in a waste dump, whilst large-scale mining operations continue behind him. With licensed companies bringing in bigger machines than ever before, locals fear that Hpakant, for centuries the world's most important source of high value jade, will soon be empty of the stone. CREDIT: Minzayar



The jade business is a fundamental part of life in Kachin State. The hero of this Kachin film, entitled 'Seng Htu Brang and Ja Hnang Shayi' (in English: 'The Jade Mining Boy and the High Class Girl') is a young jade miner who risks the perils of police and landslides to make his living from the famed stone.



Frantic jade extraction has destroyed Hpakant's environment, turning its mountains into craters, polluting its lakes and streams, felling its forests and – as shown in this picture taken in 2014 – causing flooding.

## The environmental and social collapse of Hpakant

The concentration of vast natural wealth and militarisation in a remote place has condemned Hpakant to become Myanmar's answer to the old Wild West – a place where those with money and guns have total impunity and display minimal respect for the local environment and culture. The impacts have been catastrophic for the people who inhabit the area.<sup>360</sup>

One small-scale miner, an ethnic Shan who moved into the area at a young age, described the changes he had seen to Hpakant's environment:

*"I came 40 years ago. At that time Hpakant was like a jungle, with forest everywhere. Now the environment around Hpakant has changed. 40 years ago the water*

*in the river was very clean. There were even tigers living there. That time was the BSPP [Burma Socialist Programme Party / Ne Win dictatorship] era. People did not find it easy to dig jade. Now the rivers become dry, the forests are felled, the tigers have gone... Now jade mountains disappear within just a few days... Now no more malaria here, because all the forests have gone!"<sup>361</sup>*

A former jade miner gave another account of the changes wrought by industrial scale mining:

*"When I worked in the jade mines, the Uru River was clean and clear. You could drink the water. Now that is no longer possible. The streams that feed the Uru River now only flow during the rainy season. This is because the tailings from the jade mines now block their natural course. In the old days, the KIO controlled a landscape of mountainous forests, but now there is no forest. Mountains have become valleys and valleys have become mountains."<sup>362</sup>*

Untrammelled jade exploitation has turned Hpakant into a moonscape, with mining bringing down "jade mountains", leaving behind water-filled craters and causing widespread flooding and pollution.<sup>363</sup> In recent months there have been a series of fatal accidents resulting from the common company practice of dumping huge quantities of waste into lakes and streams or in massive mounds which are prone to collapse. One 28-year-old teacher living in a village near the Maw Sizar mine described how a landslide caused his house to fall into a mine. He managed to escape, but the school in which he works is very close to a mining area and so very dangerous for the children.<sup>364</sup>

In April 2015 the Kaday (#2) mine operated by Myat Yamon – a company controlled by former USDP General Secretary Maung Maung Thein and profiled in Chapter 2 – was the scene of a particularly deadly accident. A film of the incident shows a torrent of liquid mud cascading over the edge of the crater where the company's staff were operating, engulfing the machines and their operators in its path.<sup>365</sup>

According to local residents the company claimed that 11 people died but the real total was between 30 and 60. They added that the disaster was caused by Myat Yamon's dumping of tailings on a bed of liquid mud above the mine. The waste then shifted and flooded into the crater.<sup>366</sup> To the best of Global Witness' knowledge no judicial measures have been taken to hold the company accountable for the accident.

Landslides are not the only impact of reckless company activities. In March 2015, KDNG recorded just a few of the accidents caused by the vehicles brought into Hpakant by licensed companies. These included: a dump truck hitting people washing at a river crossing and killing a 22-year-old and a 13-year-old; another dump truck hitting a small vehicle, causing one of its passengers to fall out and be run over by the next truck in the convoy; and another brake failure incident, causing a truck to seriously injure a 38-year old-woman.<sup>367</sup>

Local people report that companies' use of explosives is forcing them to leave their homes

and they blame the blasting for "chickens no longer laying eggs".<sup>368</sup> The wholesale stripping of the Hpakant region's forests is said to have made the "environment more dry than before".<sup>369</sup> Traditional livelihoods of farming and mining have been disrupted by the loss of land, pollution and the takeover of the jade industry by government-licensed companies.<sup>370</sup> A single mother of three children who has lived in the Maw Sizar area since 1991 described the impact of the operations of Kyaing International, a mining company owned by the family of former military dictator Than Shwe:

*"Up until around 2005 I had good opportunities to make a living for my family through small-scale jade trading. When the company arrived, however, I was told I must leave the house and accept one million kyats compensation. I did not wish to accept, but then backhoe diggers came and destroyed my home. This was the rainy season and my family and I had no shelter. Many others were in the same situation. In 2012 the company had to suspend its operations and I had opportunities once again to trade small amounts of jade dug in the company's concession by artisanal miners. But then in 2014 the suspension was lifted, the police came and chased the small-scale miners away and the company returned to exploit the area once more."*<sup>371</sup>

There is widespread drug use amongst jade miners, and the jade boom has brought with it increased prostitution and gambling.<sup>372</sup> In the face of indifference or complicity on the part of the authorities, local groups are undertaking their own efforts to combat the harm the jade industry is causing. In July 2015, for example, a church-organised anti-drugs committee instigated the bust of one of Hpakant's main dealers. This resulted in the seizure of a massive drugs haul and the equivalent of US\$3 million in cash, together with a document setting out around US\$500,000 in bribes the dealer had apparently been paying to members of the police, Special Branch and local officials.<sup>373</sup>

Despite the strength of these voices, their calls for a new approach to jade mining which benefits local people and mitigates harm have so far been ignored. This has direct implications for the conflict which we explore in the next chapter.

## Living the jade rush

Tens of thousands of people from across the country have flooded into Kachin State to chase the jade dream, all hoping to make their fortune with the right jade find.<sup>374</sup>

One 41-year-old described how he came to Hpakant 20 years ago to make his fortune. Without the resources to secure a jade licence he has become a *yemase* collector – a hand-picker who combs through the company waste for jade.<sup>375</sup> During the 2012-2014 mining suspension, when licensed companies withdrew from Hpakant, he was able to move into the concession areas, working on the cliffs in Maw Sizar “even though it’s risky, because there is good jade”.

He has made two lucky finds of jade pieces worth five million kyat (around US\$5,000) and six million kyat (around US\$6,000), but like many others has become caught in “a cycle of jade and drugs” and unable to save money. Six months ago, he went home to take the monkhood and gave up drugs, but fell back in feeling tired and depressed. He still holds out hope that he will one day become a “*laoban* [jade boss] billionaire”, promising that if he finds a 10 million kyat piece of jade he will return home for good.

This experience is typical of the ordinary miner in Hpakant. Without legal authorisation to mine, they find themselves at constant risk of arrest and have to flee or pay off police. For those found trespassing on company property the consequences may be even more serious. In October 2014, a *yemase* collector called Gum Ja Aung was separated from his two friends whilst searching for jade. The friends later found his dismembered body on the compound of the Shining Star mining concessionaire, where he had been killed by a company machinery operator.<sup>376</sup> He left behind a pregnant 22-year-old wife and their one-year-old daughter.<sup>377</sup>

.....

*“We feel that we have no security for our lives here. The companies came back here recently. The man was killed with a backhoe digger. Hpakant will soon disappear without any benefit to the local people if they use such big machinery to mine. They are useless for the area. Every company is connected with an army general. The Chinese are also behind them. Indonesia spends 70 percent of the profits from resources extracted in Aceh in the region. What are the benefits for Kachin State from resource extraction? That’s why we staged the protest.”*

Local clergyman, Hpakant<sup>378</sup>

.....



As one old jade hand explained, "if you have capital to invest, you will be happy, but ordinary jade miners are like rubbish – they only get soil". Most of those who go to the jade mines become 'yemase' collectors who "just find stones in the debris left by big companies".<sup>379</sup> CREDIT: Minzayar



A group of jade miners who have migrated from other regions of Myanmar to find their fortune in Hpakant inspect a stone they found during the day. CREDIT: Minzayar



At night, yemase-collectors with torches search for raw jade stones in a pile of waste dumped by licensed companies in the Maw Sizar area of Hpakant. CREDIT: Minzayar



Yemase-collectors search through waste dumped by licensed company trucks in Gwi Hka, to the south of Hpakant Town. CREDIT: Minzayar



Teams of small-scale miners use pneumatic drills to work jade plots in Hpakant in July 2014, during the mining suspension. Since the ban has been lifted and the licensed companies have returned to Hpakant, these 'unofficial' small-scale miners have been largely excluded from the major jade mining sites. CREDIT: Minzayar





A group of freelance miners hold a piece of jade they have just dug in a mining company concession area near Lone Khin, Hpakant Township, in July 2014, during the period that the licensed companies' operations were suspended by the government. CREDIT: Minzayar



Small-scale miners typically operate without government licences. Here a group of miners are interrogated by the police, their machines are confiscated and their laoban (boss) is required to go to the police station the next day. The miners claim that they have been targeted because they have not yet bribed the police, whereas another mining team next to them, who have already paid up, are left completely undisturbed. CREDIT: Minzayar



Locals protest the death of a yemase-collector, whose dismembered body was found on the compound of the Shining Star mining company. He had been killed by a company machinery operator. CREDIT: KDNG



A heroin seller prepares a shot of the drug which he sells at 2,000 kyat – which happens to equate to the lowest price of a small piece of jade. Artisanal miners typically take up to five of such shots of heroin a day. CREDIT: Minzayar

## CHAPTER 4: JADE AND ARMED CONFLICT

*“Why did the ethnic groups rise against the government? It is because they don’t enjoy equality, autonomy and rights. We must give them to them. To do so, we need to consider power as well as wealth sharing”*

Minister to the President’s Office responsible for the peace process Aung Min<sup>380</sup>

The war in Kachin State that re-ignited in June 2011 after a 17 year ceasefire has left thousands dead and around 100,000 civilians displaced.<sup>381</sup> Both sides have been accused of abuses. For its part, the Kachin Independence Army / Kachin Independence Organisation (KIA/KIO) has faced allegations of recruitment of children and use of landmines.<sup>382</sup> The charge sheet against the Tatmadaw is a good deal longer however, and includes extrajudicial killings, physical and psychological torture and forced labour.<sup>383</sup> Some commentators have concluded that the Tatmadaw is deliberately targeting women in Kachin State for rape and other kinds of sexual violence.<sup>384</sup> In the course of doing research on the jade business, Global Witness has also heard accounts of Tatmadaw troops using civilians as human shields during fighting at Awng Ba Le, north of Hpakant, in early 2015.<sup>385</sup>

### What’s it got to do with jade?

*“Currently the development process is a top-down one handled by the Nay Pyi Taw government and companies. The local state governments and local people have no right to take part in it. This kind of development program brings more harm than benefit to local people and creates conflict.”*

KDNG / Kachin State Natural Resources Development Policy Discussion Paper

The conflict in Kachin State has a range of causes, many of them linked to the aggressive centralisation policies of successive governments in Myanmar and the growth of Kachin nationalism in response.<sup>386</sup> Jade is a significant factor, however. As described in the previous section, the perception amongst Kachins that their jade is being stolen from them by military families, companies and cronies is a powerful driver of nationalist sentiment. The relationship between jade and conflict matters for at least three other reasons:

- The army families and companies that control many of the jade mines would lose out in the event of an equitable peace deal. They have the financial motivation, and possibly the political reach, to keep the conflict going until central government control over Hpakant can be assured.
- The Tatmadaw officers in Kachin State are making personal fortunes through extortion of the jade business, and so have a reason to justify their deployment and keep the money flowing.
- Jade is the main source of income for the KIA/ KIO. This makes the battle for control of jade revenues a strategic priority for both sides in the conflict.

It is unlikely that a peace agreement that does not meaningfully address the question of who benefits from Kachin State’s jade will be a lasting one.

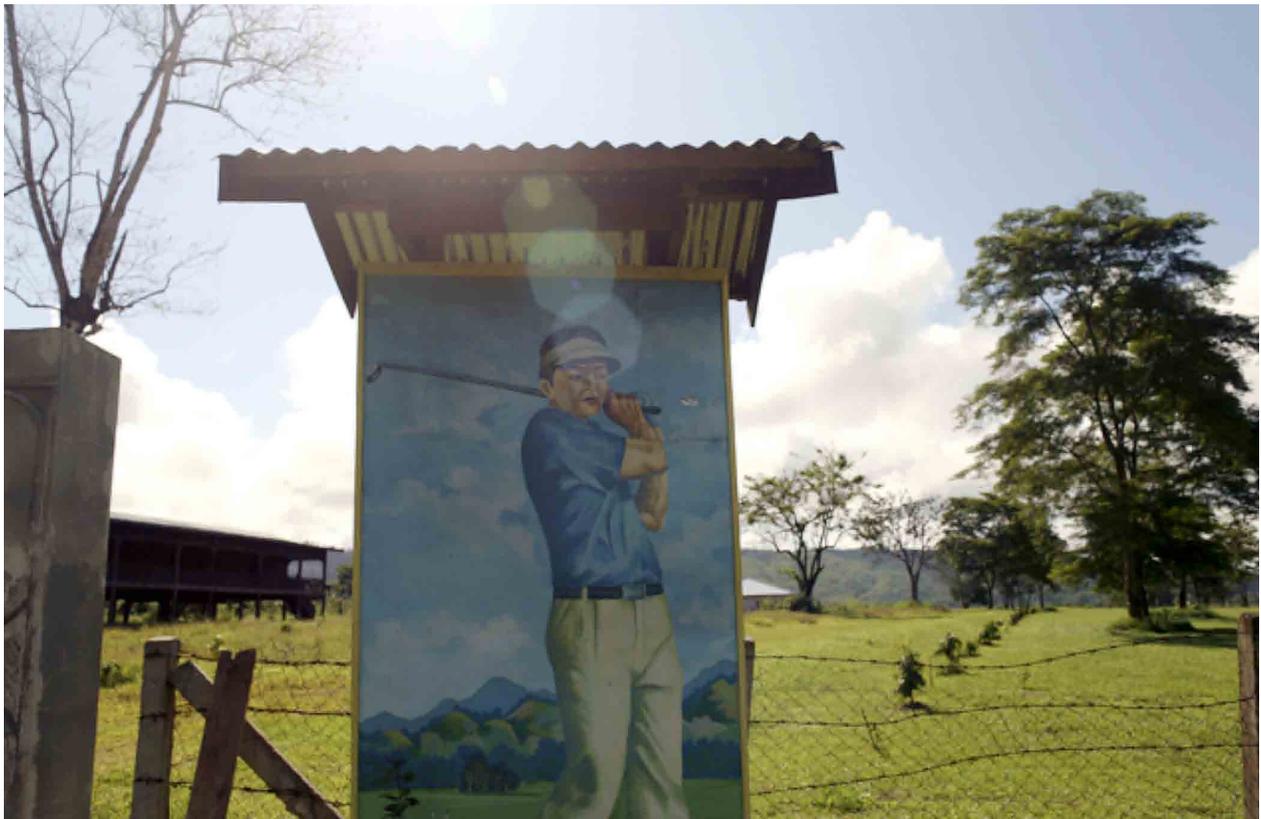
## The backstory

The KIA/KIO first established itself in Hpakant during the 1960s and jade became the group's main source of funding for over two decades.<sup>387</sup> In the early 1990s, following ceasefire deals with other armed groups, the Tatmadaw was able to concentrate its fire on the KIA/KIO and progressively took full control of the jade mines.<sup>388</sup> This was almost certainly a pivotal factor in the KIA/KIO's decision to sign a ceasefire with the government in 1994.<sup>389</sup>

The Myanmar government proceeded to allocate jade mining concessions to Tatmadaw families, friends and conglomerates, as well as ceasefire groups such as the United Wa State Army / Party.<sup>390</sup>

The 1994-2011 ceasefire period saw a scramble for Kachin State's natural resources – timber as well as jade – which made some KIA/KIO leaders and Tatmadaw officers very rich.<sup>391</sup> But for most Kachins, the ceasefire brought deforestation, land grabs, Buddhist Burmese migration and an increasingly pervasive Tatmadaw.<sup>392</sup>

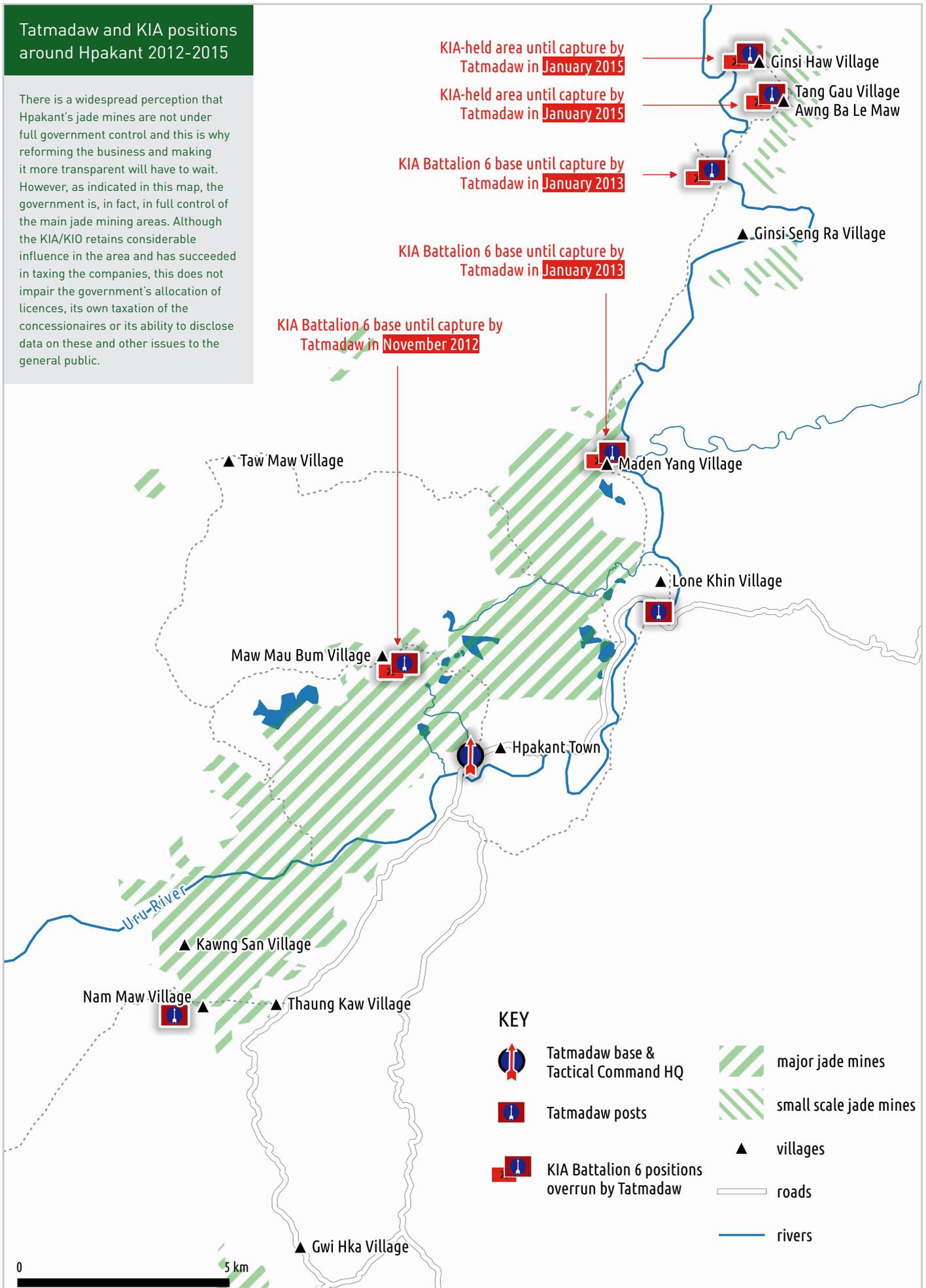
Starting in 2009, the government issued increasingly insistent demands that the KIA/KIO and other ceasefire groups become part of 'Border Guard Forces' under the Myanmar Army.<sup>393</sup> This broke promises to defer discussions about the KIA/KIO giving up its arms until after a new government was in place, and set in motion a chain of events that culminated in the conflict re-igniting in June 2011.<sup>394</sup>



As the KIA has been pushed further away from Hpakant, the buildings it previously used have been abandoned. This is a golf club in the San Hkar area previously used by KIA officers. CREDIT: Minzayar

**Tatmadaw and KIA positions around Hpakant 2012-2015**

There is a widespread perception that Hpakant's jade mines are not under full government control and this is why reforming the business and making it more transparent will have to wait. However, as indicated in this map, the government is, in fact, in full control of the main jade mining areas. Although the KIA/KIO retains considerable influence in the area and has succeeded in taxing the companies, this does not impair the government's allocation of licences, its own taxation of the concessionaires or its ability to disclose data on these and other issues to the general public.



## Everything to lose – the licensed jade mining companies

*“They want to get as much jade as possible – ceasefire or no ceasefire. This is their plan.”*

Jade businessman<sup>395</sup>

The major jade mining companies, profiled earlier in this report, will be the biggest losers in any loosening of the government’s territorial control over Hpakant or the introduction of a system that gives more benefits to the population of Kachin State. Some of the families standing behind the big jade mining companies are very powerful, notably those of former Senior General Than Shwe, Minister Ohn Myint and former USDP General Secretary Maung Maung Thein.<sup>396</sup> Military company MEHL meanwhile, is an investment vehicle for retired military officers associated with the State Peace and Development Council military junta.<sup>397</sup> Many other companies are believed to have connections with powerful military figures.<sup>398</sup>

A number of sources claim that a group of the biggest jade mining companies approached the government in late 2011 or early 2012 requesting the Tatmadaw launch an offensive to dislodge KIA positions around the mining areas.<sup>399</sup> In the second half of 2012 the Tatmadaw did launch a major offensive against the KIA in Hpakant which, as the map featured in this chapter shows, mostly achieved the outcome the companies are said to have been looking for.

## A mafia in the mines – the Tatmadaw and jade

*“There are no rules here: battalion commanders, small officers and others all want to benefit from each find of good jade. If we don’t pay them enough, then their intermediaries come and demand more money.”*

Jade businessman<sup>400</sup>

The Tatmadaw’s main priority in Hpakant is milking money from the jade business and this imperative frequently trumps its designated function of fighting the KIA. The impacts weigh most heavily on small-scale miners and traders although the larger operators also have to pay off the army to facilitate their mining and trafficking of jade.

Military officers work through a network of brokers, informers and plain clothes police to extort money from small scale miners at a rate of 20% of the value of each stone found.<sup>401</sup> The Tatmadaw also makes lots of money through the provision of security to companies.<sup>402</sup> According to one mining firm this involves the licence-holders making one-off lump sum payments to the Tactical Commander – the commanding officer in Hpakant – of 5-10 million kyat (US\$5,000-US\$10,000) and then providing stipends to the soldiers or police billeted to their compounds.<sup>403</sup>



A Tatmadaw soldier walks through a jade mining site in Lone Khin as the police and military forces come to arrest illegal jade miners and the miners’ families stand and shout in the background. The Tatmadaw systematically extorts from illegal miners and demands a payment of 20% of the value of each stone that they find; generating a substantial off-budget revenue stream. CREDIT: Minzayar

Another key source of income for the Tatmadaw is bribes from companies and carriers who smuggle jade into China. Large companies and more established jade carriers must cultivate relations with the Northern Commander – the most senior officer in Kachin State – as well as other military personnel, the heads of the police and other agencies,

and pay them off systematically.<sup>404</sup> The main checkpoints on the roads out of Hpakant during 2014 and 2015 are illustrated in the map on the following page.<sup>405</sup> Global Witness has interviewed a range of specialist jade carriers, who describe how the checkpoints work:

- The most powerful and best-connected companies pass straight through the checkpoints because their trucks are guarded by soldiers or accompanied by an officer – such as the Northern Commander's principal staff officer.<sup>406</sup>
- The medium-sized jade carriers send a car in advance to pay off each checkpoint.<sup>407</sup> The agents give the checkpoint officers the number plate of the jade-carrying vehicle behind so they do not stop it by mistake.<sup>408</sup>
- Small-scale carriers who lack connections and money try to hide their jade. If they are caught, they have to pay bribes which are often far in excess of the value of the stone they are carrying.<sup>409</sup> If they do not pay they face prosecution and potentially a jail term of several years.<sup>410</sup>

Close observers of the situation in Hpakant claim that the Tatmadaw and the KIA/KIO actively collude to sustain their mutual interest in the jade trade. One observed that the Tatmadaw turn a blind eye to the KIA/KIO's jade transportation routes: "they know which ones they are, but they don't say anything."<sup>411</sup> Another described how the Tatmadaw and KIA maintain close contact in Hpakant to agree on how much tax each will receive from significant jade finds.<sup>412</sup>

*"Fighting is fighting, but business is business. Sometimes the relationships are very good!"<sup>413</sup>*

KIA/KIO intelligence officer

The Tatmadaw Tactical Commander and KIA Battalion 6 use the same jade brokers both to levy

payments from small-scale miners and to maintain communications, thereby reducing the scope for misunderstandings that might lead to armed confrontation.<sup>414</sup> During a stand-off between the Tatmadaw and KIA in October 2014, the Tactical Commander in Hpakant sent his KIA counterpart a message – via jade brokers – that he did not want to launch an attack, but that he was forced to follow orders from Nay Pyi Taw.<sup>415</sup>

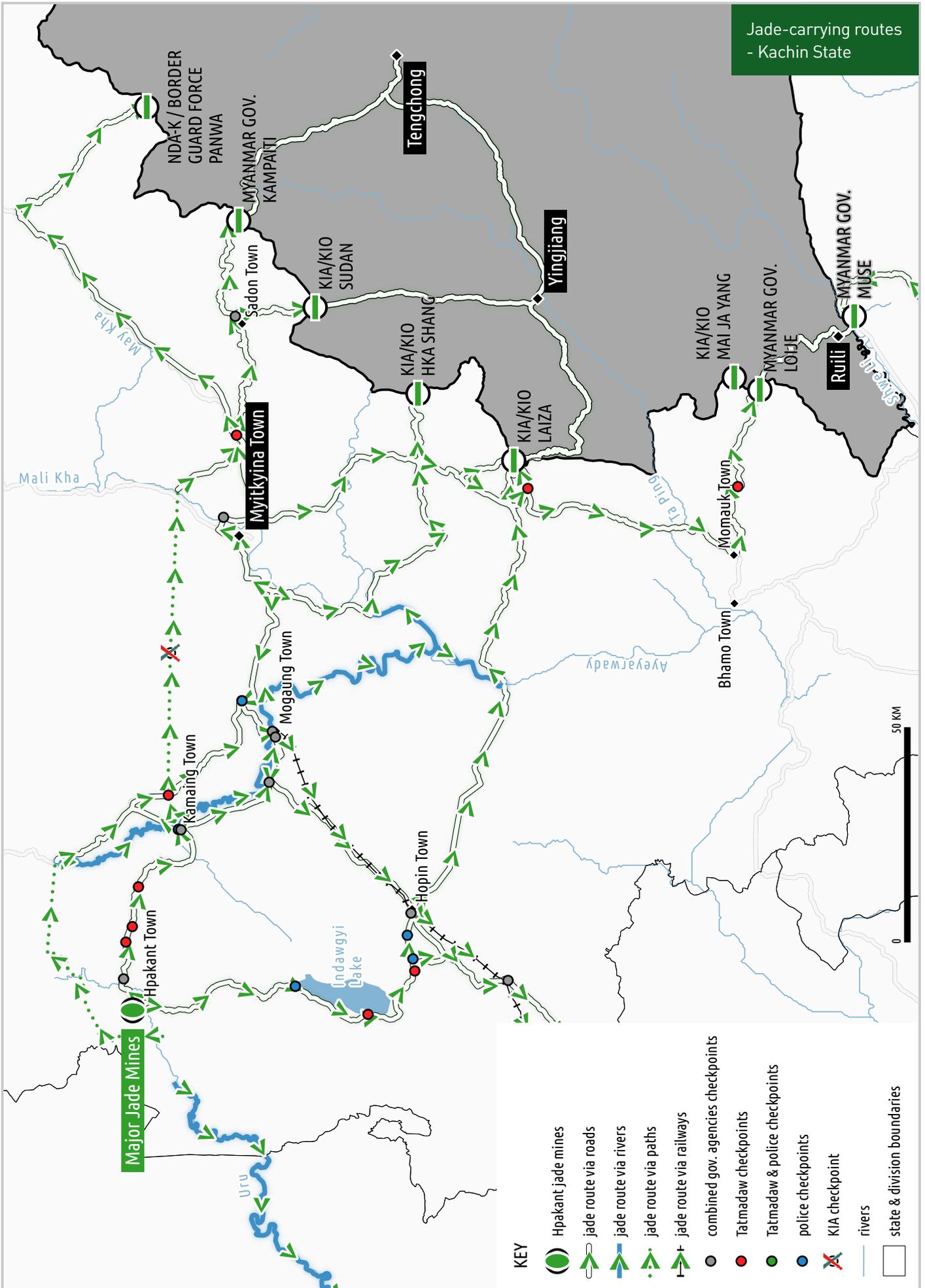
As with war economies the world over, genuine peace and outright war are the main enemies of the military entrepreneur in Kachin State. Far preferable are the grey areas in between that justify the deployment of the troops needed to intimidate and extort but do not demand much actual fighting. Peace-makers, both within the government and outside it, must recognise and confront these incentives and behaviour patterns if they are going to find a way of persuading the Tatmadaw to support a substantive peace agreement.

## The KIA/KIO's main artery

*"The Burmese military government said that the main artery of the KIA/KIO is the Hpakant region. That is why that main artery had to be destroyed. They do not fight physically with us, they do it behind our backs"*

KIA/KIO official, 2002.<sup>416</sup>

The KIA/KIO made Hpakant a key strategic target when conflict resumed in June 2011. The group's representatives told Global Witness in a letter that their aim was "to resume control and management of the jade business".<sup>417</sup> In practice this involved deploying KIA troops in and around Hpakant, as a basis for taxing the jade mine concessionaires, taxing small scale miners and trading jade.<sup>418</sup>





Elephants which transport food supplies between the KIA forward positions and its main base pass a KIA checkpoint north of the major jade mines in July 2014. When the government-KIA/KIO ceasefire broke down in 2011, the KIA/KIO made Hpakan a key strategic target, deploying troops in and around the area to tax licensed jade companies and small scale miners and to take a direct role itself in the jade trade. By the start of 2013 all the KIA posts in the immediate vicinity of the big jade mines had been overrun by the Tatmadaw, however. CREDIT: Minzayar

From a KIA/KIO perspective the government had breached the ceasefire and this meant that any agreement to stay out of the mining areas and not tax the companies was null and void. Officials at the KIA/KIO's Laiza HQ wrote to the main licence-holders demanding taxes and, according to one source close to the KIA/KIO, many of the bigger concessionaires each paid over between US\$100,000 and US\$500,000.<sup>419</sup> In January 2012 alone the KIA/KIO collected over US\$20 million from the companies.<sup>420</sup> Senior ministers were incensed and the KIA/KIO was surprised by its success.<sup>421</sup> Shortly afterwards Nay Pyi Taw, in an apparent attempt to stop the KIA/KIO making money from jade, suspended mining with effect from May 2012.

.....

*"If mega development projects are started before political resolution, there will be more conflict between the government and ethnic armed groups and more conflict between the government and local communities. Therefore there must be a moratorium on all new projects."*

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After the mining suspension was lifted in September 2014, the KIA/KIO began taxing the companies once more.<sup>422</sup> Its taxation system is based on

the government's own records, which it secretly bought from a Ministry of Mines official.<sup>423</sup> The US\$500 spent on a flash drive full of government data has enabled the KIA/KIO to extract millions of dollars from the concessionaires.<sup>424</sup>

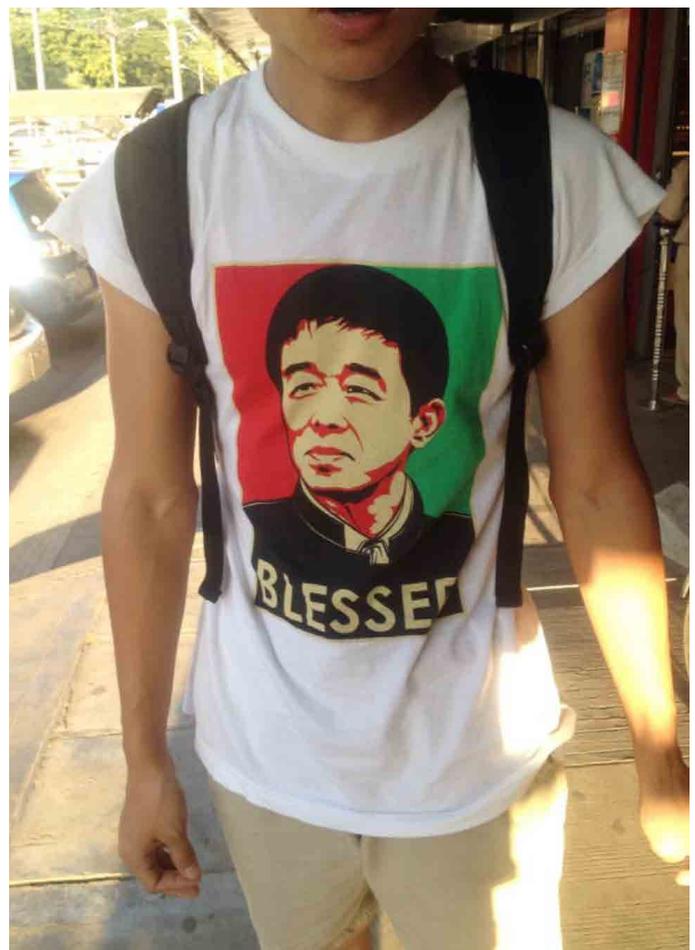
According to the KIA/KIO's written response to Global Witness, its Department of Commerce "is responsible for taxation of jade mining concessions and taxation on the sale of jade which varies depending on its value ranging from 10-20% of the value and up to one third of the profits. The companies are taxed on the number of miners working, the type of machinery used and the fuel used to run the machinery. Each person entering the jade mining area is required to pay an entrance fee."<sup>425</sup>

While the KIA/KIO's taxation of the companies appears systematic on paper, its representatives told Global Witness that in practice the amounts the companies pay are negotiated.<sup>426</sup> Furthermore, sources familiar with the KIA/KIO's revenue generation activities say that taxes are collected from the companies by a broker – Aik Haw – who is the son-in-law of United Wa State Army / United Wa State Party leader Pao Yu Hsiang and is a business associate of drugs kingpin Wei Hsueh Kang.<sup>427</sup> The KIA/KIO denies that it works with Aik Haw or any other middleman.<sup>428</sup> However, the perception that much of the KIA/KIO jade taxation is lost to corruption is widespread within Kachin State.<sup>429</sup>

Like the Tatmadaw, the KIA/KIO also taxes small scale miners, with a standard levy on small jade finds of 10% of value.<sup>430</sup> While the more exacting 20% Tatmadaw fee is widely recognised as corrupt and illegal, the KIA/KIO's is perceived by many Kachins as a legitimate taxation system, albeit a basic one, and the payer receives a receipt.<sup>431</sup> The receipt is also a permit to transport the jade to the border with China without paying any more duties.<sup>432</sup>



KIA/KIO receipt for tax paid on a piece of jade. Both armies levy payments from small-scale miners, but whilst the Tatmadaw demands are generally regarded as straightforward corruption, the KIA/KIO charges are perceived by many Kachins as a legitimate form of taxation. CREDIT: Minzayar



KIA Deputy Chief of Staff Gun Maw is seen as the face of a younger and more reform-minded generation of KIA/KIO leaders. But questions remain about how much the KIA/KIO old guard is willing to open up about how it manages its jade taxation system and what it does with the money. CREDIT: Susan Morelands

The KIA/KIO actively trades and exports jade itself, using a network of paths running north from Hpakant.<sup>433</sup> In some cases its jade taxation teams offer traders a choice between paying the value tax and exporting their stones themselves or doing a deal with the KIA/KIO. Such deals either consist of selling the jade outright to the KIA/KIO, or going into partnership with them on the transportation and sale of the stones and receiving a share of the final sale price.<sup>434</sup> This process of

the KIA/KIO carrying the jade out to China via its Laiza HQ and then selling it can take up to a year.<sup>435</sup>

Prior to the conflict the KIA/KIO had a company registered in Yunnan Province called Yingchin which was specifically dedicated to trading jade.<sup>436</sup> It was wound up in 2012 following the resumption of the conflict and it is not clear whether the KIA/KIO has set up another firm to take its place.<sup>437</sup>



A KIA checkpoint north of the main Hpakant jade mines and around 1000 metres from the nearest Tatmadaw post, July 2014. This checkpoint was overrun in a Tatmadaw offensive just a few months later, as the government sought to weaken the KIA/KIO's capacity to tax the licensed jade mining companies. CREDIT: Minzayar

## CONCLUSION

Myanmar's jade industry may well be the biggest natural resource heist in modern history. The sums of money involved are almost incomprehensibly high and the level of accountability is at rock bottom. As long as the ghosts of the military junta are allowed to dominate a business worth equivalent to almost half the country's GDP, it is difficult to envisage an end to the conflict in Kachin State. Lessons from other nations afflicted by the resource curse, as well as Myanmar's own history, suggest that the threats to the country's wider political and economic stability are also very real.



A view of Hpakant's 'treasure land'. Root and branch reform is essential if Myanmar's jade riches are to benefit local people. CREDIT: Minzayar

The cast of characters we have unmasked are not only the least deserving but also amongst the most dangerous recipients of Hpakant's jade wealth one could imagine. More worrying still is that we have only scratched the surface. What if the widespread assumption that all major jade companies are controlled by military families is true? Then there is the issue of who in China is benefitting, and what influence they may exert behind the scenes in Kachin State and in Myanmar

as a whole. This is a question we have not even begun to answer, but it is clear that immense amounts of money from jade are accumulating on the Chinese side of the border as well as in Myanmar.

The challenge is daunting. It is easy to see why even reformers in Nay Pyi Taw have been reluctant to face up to what is really going on. Many governments in countries emerging from conflict or tyranny try to defer the question of who will benefit from

natural resources. This calculation is sometimes underpinned by vague notions of a grand bargain: the idea that former despots, rebels and military commanders can be sated with a super-size slice of the nation's resources and will agree not to be 'spoilers'.

It rarely works out that way. Looted resource wealth does not just rob local people of the opportunities for a better life that they deserve. It empowers opponents of peace and democracy who have little popular support but may attempt a comeback if handed the keys to a war chest.

Myanmar has a good chance of avoiding this fate. For all its limitations, the Thein Sein government has crossed some very significant thresholds, in terms of both natural resource governance and peace negotiations, which it will be hard, although not impossible, for a successor regime to step back from. Myanmar also, for now at least, has the world's attention.

Whoever leads Myanmar's next government has the opportunity to start transforming jade from the curse it currently is to the blessing it should be for people in Kachin State and all over Myanmar. Indeed, they will need to do this if they are to take the country further along the path to peace, democracy and prosperity. Moreover, with the plunder accelerating, they will have to act fast.

The new government's initial priorities should be urgent and concerted action to build transparency and accountability in the jade business and to bring the issue of resource management into the peace process. To be successful, it will require considerable support from its international partners. That is why the recommendations at the front of this report are addressed as much to foreign governments and international organisations as to the winners of November's historic election.

## Glossary and Acronyms

a kyo thu	A joint venture arrangement between state-owned enterprise Myanmar Gems Enterprise and a jade mining company, whereby the former takes 40% of post-tax sales revenues and the latter takes 60%.
beneficial owner (or 'ultimate beneficial owner')	A company's ultimate beneficial owners are the individuals (or single individual) who ultimately own or control the company, either directly or indirectly. This means the persons who control the actions of the company and/or who ultimately receive the profits. Significantly, a beneficial owner must be a real, live individual and not another company or trust. For companies with complicated ownership structures, involving many different corporate vehicles and, in some cases, private agreements over ownership and/or control, the beneficial owners are the individuals who are right at the top of the chain.
DICA	Myanmar's Directorate of Investment and Company Administration. DICA is a directorate of the Ministry of Planning which administers Myanmar's company registry.
EITI	Extractive Industries Transparency Initiative. EITI is a global standard for transparency in the oil, gas and mining industries which is currently being implemented in Myanmar.
Hpakant	An area within Myanmar's northern Kachin State where the world's most valuable deposits of high value jadeite (jade) are located.
JADE Act	Tom Lantos Block Burmese JADE (Junta's Anti-Democratic Efforts) Act of 2008. This is a United States law that prohibits imports of jade and rubies from Myanmar.
KIA	Kachin Independence Army. A non-state armed group representing the Kachin ethnic group.
KIO	Kachin Independence Organisation. The political wing of the Kachin Independence Army.
kyat	A unit of Myanmar's currency.
laoban	The Chinese word for boss, used in Hpakant to mean jade mining boss. This term is often used to refer to someone who manages a group of small-scale (often illegal) miners.
MEC	Myanmar Economic Corporation. A Myanmar army company.
MEHL	Myanma Economic Holdings Limited. A Myanmar army company. Unlike MEC, MEHL writes its name in English without an 'r' at the end of Myanma.
MGE	Myanmar Gems Enterprise. A state-owned enterprise which also acts as a sub-division of the Ministry of Mines responsible for managing the mining and marketing of jade and other gemstones.
MGJEA	Myanmar Gems and Jewellery Entrepreneurs Association. The major industry body that represents jade businesses in Myanmar.
Nay Pyi Taw (or Naypyidaw)	The capital of Myanmar.
NRC (or CSC) number	National Registration Card number (or Citizenship Scrutiny Card number). This is a national identification number allocated to each citizen of Myanmar.
OFAC	Office of Foreign Assets Control. An office of the United States' Department of the Treasury which administers and enforces American economic and trade sanctions.
PNO	Pa-O National Organisation. The political wing of the non-state armed group which represents the Pa-O ethnic group.
SPDC	State Peace and Development Council. The name used by the ruling military junta in Myanmar between 1997 and 2011.
SLORC	State Law and Order Restoration Council. The name used by the ruling military junta in Myanmar between 1988 and 1997.
Tatmadaw	Myanmar's armed forces, administered by the Ministry of Defence.
yemase-collector	A 'jade-picker' who searches through the waste dumped by mining companies to find pieces of jade which they have missed.
USDP	The Union Solidarity and Development Party. The ruling party of Myanmar, and the successor to the Union Solidarity and Development Association (USDA), a mass organisation set up by the military junta's State Peace and Development Council (now dissolved).
UWSA	United Wa State Army. A non-state armed group which represents the Wa ethnic group.
UWSP	United Wa State Party. The political wing of the United Wa State Army.

## Appendix 1: how much is Myanmar's jade business really worth?

The following estimates are just that – estimates. Our intention, in publishing some specific figures, based on the incomplete data available, is not so much to have the last word on the value of Myanmar's jade business as to trigger a debate and encourage the full disclosure of the information the public needs to make more definitive assessments on an ongoing basis.

This paper sets out the basis for the estimates of jade production value described in the main body of the report and covers the following:

- Key considerations
- Data sources
- Estimates of the value of Myanmar's jade production based on Emporium data
- Using Chinese trade data to make an alternative estimate
- Adjusting the 2014 jade production estimate based on Emporium data to account for jade sold through local jade fairs
- Estimating the value of total production, including jade mined but not officially recorded
- Estimating the Myanmar government's take of the country's most lucrative natural resource

### (A) Key considerations

Any assessment of Myanmar's jade industry is limited by the absence of detailed and disaggregated public data on production and sales. Calculations are further complicated by a range of factors including the following:

- As explained in Chapter 1, there are very high rates of jade smuggling, particularly in relation to the most valuable stones. This means that sales at the Myanmar Gems Emporium, the main official route for jade traders to sell to the international market, in fact represent only part of Myanmar's jade trade.
- Jade smuggling is aimed at evading taxation not only in Myanmar but also in China, the main market for the gemstone. Consequently,

Chinese import records cannot be relied upon as a comprehensive data source on Myanmar jade imports.

- The sales data that is available from the annual emporiums is distorted by price manipulations, and the systematic smuggling of high-grade jade means that these stones are under-represented at emporium sales.
- An additional shortcoming in sales data is that buyers frequently do not complete the purchase of jade lots on which they win bids at the Myanmar Gems Emporium. According to state-owned enterprise and regulatory body Myanmar Gems Enterprise (MGE), only 54.84% of sales at the 2013 Emporium were completed, and industry sources estimate that the completion rate went down to 30.38% at the 2014 Emporium. This means that records of sales made at the emporiums do not reflect the volume and value of cleared sales.
- 2014 is an atypical year in that, in addition to official sales of jade through a major emporium geared towards the international market (51st Myanmar Gems Emporium), two official jade fairs (or local emporiums) were also held. Only very low-grade jade was available for sale at these fairs and buyers were domestic rather than international.
- There are huge variations in the value of jade depending on quality, which itself depends on a range of factors including colour, translucence, texture and consumer trends. As explained in Chapter 1, the price of a single kilogram (kg) at the 2014 Emporium ranged from less than US\$2 to over US\$2.89 million. Valuations cannot therefore simply be based on volume, but also require data on the grades of the jade.

### (B) Data sources

Global Witness has obtained a range of unpublished data sets which provide a basis for more reliable estimates of Myanmar's jade industry than have been made previously.

These include:

- A detailed breakdown of sales at the 51st Myanmar Gems Emporium, the only official jade sale for the international market in 2014 (the '2014 Emporium'). This contains information on weight, sale, price, owner and buyer for over 6,000 jade lots. It is separated into two categories:
  - Jade lots sold by tender. This is the process used to sell lower value lots at the Emporium. Tender data contains jade grade information, with most lots marked as one of three categories: imperial (high-grade); commercial (medium-grade); or utility (low-grade).
  - Jade lots sold by auction. Jade grades are not marked in the data set we have, but the auction is the process used to sell the higher value stones.
- Breakdowns of jade lots – and their categorisation by grade – offered for sale at the 52nd Myanmar Gems Emporium in 2015.
- Breakdowns of the top-selling companies and their sales at the 50th Myanmar Gems Emporium in 2013.
- Data on jade sold at every Emporium held between 2005 and 2014, broken down by overall aggregate revenues and weights.<sup>438</sup>
- Data on aggregate sales at jade 'fairs' aimed at the domestic market in 2014.
- Data on official revenues from mine site taxes in 2013.

This data is not comprehensive and it is subject to various biases, but it is more detailed than any information used in previous public assessments of the jade industry. In conjunction with public data, it allows us to make new valuations of Myanmar's jade industry.

## (C) Variables

Our calculations of total sector size of Myanmar's jade industry are based on three variables:

*(1) Total volume of jade produced:* This is comprised of the officially recorded jade production and we use government statistics as the basis of our calculations of the sector's value. However, multiple jade industry sources have provided

evidence of systematic evasion of official controls and it is clear that, in reality, the official production data is a very significant underestimate. We examine the question of what total production (recorded and unrecorded) might amount to below in section (G).

*(2) Proportion of production of each of the three main grades of jade (imperial, commercial and utility):* The relative distribution of jade production by grade is the variable with the least information – simply put, no one knows how much of the different grades of jade are produced in Myanmar every year. However, knowing a rough percentage for different grades is essential because of the significant variation in price. We have calculated grade proportions based on data from the 2014 Myanmar Gems Emporium. However, systematic smuggling of higher value jade means that the Emporium under-represents the proportion of more valuable jade produced. We have therefore also used an additional estimate of the relative proportions of the three main jade grades as shares of production that is based on industry estimates gathered by Harvard University and Proximity Designs and used in their 2013 study on the jade business.<sup>439</sup>

*(3) Values of the three main grades of jade (imperial, commercial and utility):* To calculate prices for different categories of jade, we have taken averages of the prices per kilogram of imperial, commercial and utility jade sold at the 2014 Emporium. As described below, under (F), we have adjusted these averages to accommodate figures from the October 2014 local jade fair; although we recognise that this data is not representative of the business as whole, given the irregularity of such local fairs, their orientation to the domestic market and their focus on the lowest quality utility jade. Drawing on the jade fair price data is likely to pull our average price estimates down below the actual level.

## (D) Estimates of the value of Myanmar's jade production based on Emporium data

Table 1 below sets out the distribution of jade across grades and average prices per grade we have calculated based on the 2014 Emporium data.

**Table 1: Prices and distribution of jade across grades at 2014 Emporium<sup>440</sup>**

Jade grade	Total weight (in kg)	Percentage of total volume	Total value of sold jade (US\$ millions)	Average price (per kg)	Percentage of total Emporium revenue
Imperial	53,537	1.49%	US\$1,044	US\$19,491.97	29.58%
Commercial	407,137	11.33%	US\$901	US\$2,213.89	25.55%
Utility	3,131,870	87.18%	US\$1,583	US\$505.52	44.87%

One notable feature is that the proportion of imperial grade jade is very low – less than 1.5%. As explained above however, multiple industry sources have suggested that the higher value jade (particularly high-grade imperial) is typically smuggled, and it is the lower quality, higher weight stones which are sent to the Emporium. This means that the proportional split between the three grades at the 2014 Emporium is not representative of the jade that was mined, with

the former underrepresenting higher grade jade. To compensate for the distortion in the Emporium data caused by the widespread smuggling of higher quality jade, we have used industry estimates of how jade production is split across the three grades gathered by Harvard University/Proximity Designs and used in their 2013 study on jade. The split indicated by their research is set out at Table 2, and indicates higher proportions of high and medium-grade jade.

**Table 2: Distribution of jade production across grades based on interviews with industry sources by Harvard/ Proximity**

	Estimated share of total jade production
High-grade jade (imperial)	5%
Medium-grade jade (commercial)	35%
Low-grade jade (utility)	60%

In Table 3, we then apply this percentage split between the three grades, together with our average price per grade, to Myanmar's official annual jade production figures to estimate the overall value of all jade mined and officially recorded each year over the past ten years.

Since line-by-line sales data is not available for all emporiums held in Myanmar over the past decade, we extrapolate from the 2014 Emporium figures to estimate the value of jade production for previous years. We assume that the proportional share of each jade grade remains constant. We also assume that jade prices for each grade change by the same percentages over time. So, if for example the three grades were priced at US\$1, US\$4 and US\$10 one year, the next year they might be US\$2, US\$8 and US\$20. This method is imperfect, of course, but the lack of

information makes more accurate estimations impossible.

Combining these estimated prices with official production figures, and the estimated split between imperial, commercial and utility jade, we are able to calculate the total value of jade production for each of the past ten years in columns E and F. While we include the calculations in column E using the split between jade grades indicated by the 2014 Emporium, these estimates are likely to be significant under-valuations, as evidenced both by testimony from industry sources and by Chinese customs data (examined in more detail in the next section). In column F we have set out the estimates generated when we use the split between grades identified by Harvard/Proximity, which we consider more reliable.

Table 3: Estimated valuations of official jade output from 2005 to 2014

A	B	C	D	E	F
Year	Volume of jade sold at emporium (in thousand kg) <sup>441</sup>	Total value of sales at emporium (in US\$ millions) <sup>442</sup>	Total annual production (in thousand kg) <sup>443</sup>	Total sector size (2014 Emporium split between grades) (in US\$ millions)	Total sector size (Harvard/ Proximity split between grades) (in US\$ millions)
2005	3,377	US\$165	20,005	US\$974	US\$2,039
2006	11,073	US\$366	20,458	US\$677	US\$1,415
2007	15,043	US\$693	20,266	US\$933	US\$1,951
2008	12,830	US\$794	32,924	US\$2,039	US\$4,262
2009	12,938	US\$926	25,795	US\$1,847	US\$3,860
2010	16,416	US\$2,890	46,810	US\$8,241	US\$17,225
2011	16,313	US\$5,277	43,185	US\$13,969	US\$29,199
2012	4,221	US\$677	19,080	US\$3,060	US\$6,396
2013	3,927	US\$3,192	15,062	US\$12,242	US\$25,589
2014	3,865	US\$3,580	16,684	US\$15,453	US\$34,248
Totals				US\$59,435	US\$126,184

### (E) Using Chinese trade data to make an alternative estimate

The production value estimates from Table 3 / column F above are backed up by an alternative valuation based on price estimates drawn from trade data from China, the pre-eminent consumer market for Myanmar's jade.

Chinese customs data for 2014 indicates that precious and semi-precious stone imports from Myanmar were worth US\$12.3 billion. An analysis of the codes used to classify these imports shows that the vast majority of this US\$12.3 billion was jade. The US\$12.3 billion worth of gemstone imports account for less than a third of the weight of Myanmar's official jade production for 2014, and therefore is a significant underestimate of the value of Myanmar's jade production by itself. However, combining this import data with Myanmar's production data allows us to make another estimate of the total value of Myanmar's jade production.

Before going any further, how do we know that this US\$12.3 billion worth of precious and semi-precious stones was almost all jade?

China's gems imports from Myanmar are classified by codes according to a method for recording traded goods called the Harmonised System (HS). These codes, while relatively precise, can lump together more than one type of stone into a single figure. The US\$12.3 billion figure includes three HS codes: HS710310 (precious or semi-precious stones unworked), HS710399 (worked precious or semi-precious stones) and HS711620 (articles of precious or semi-precious stones). These HS codes do not cover any diamonds or gold, and also exclude worked rubies, emeralds or sapphires, which fall under HS710391 (rubies, emeralds and sapphires worked but not set). None of these gems could be included in the US\$12.3 billion figure.

Of the gemstones covered by these three HS codes, imports that entered China under the code HS710399 were by far the most valuable – worth US\$11.1 billion of the US\$12.3 billion. While disaggregated data on the values of the sub-categories of gemstones that make up this US\$11.1 billion is not available, there is more detailed data available when it comes to their weight. This shows that the vast majority – 99.2% – of these precious and semi-precious stones were either HS71039910 (the sub-code for jadeite – the higher value type of jade) or HS71039940 (the sub-code for nephrite – the lower value type of jade).

Other unspecified precious stones accounted for 0.7% of the weight. As noted, these would not have included diamonds or rubies, which are listed under other HS codes, but could have included quartz. Tourmaline and crystal accounted for 0.1% of the weight of HS710399 imports, though this amounted to only 37 kg.

What about the other two HS codes, which make up the remaining US\$1.2 billion not covered by HS710399? HS710310 (precious or semi-precious stones unworked) could include precious or semi-precious stones other than jade. However, while the average price of US\$127.69 per kg for gemstones in this category is a plausible value for pieces of very low grade jade, it would certainly not apply to some of Myanmar's other famous gem exports such as rubies and sapphires.

HS711620 (articles of precious/semi-precious stones) is harder to define or eliminate from, though given the fact that HS710399 (worked precious or semi-precious stones) was almost all jade, it seems likely that 'articles of precious or semi-precious stones' would also consist of almost all jade-based products. We therefore believe it is reasonable to assume that almost all of the semi-precious and precious stones accounted for in the \$12.3 billion figure are jade.

If we use the Chinese US\$12.3 billion gemstone imports figure to calculate an average price of jade imports, this yields a figure of US\$2,276.93 per kg of jade. We can apply this average price to the total volume of Myanmar's official jade production of 16.684 million kg in 2014 to make an alternative valuation of the sector. This calculation puts the value of 2014 jade production at US\$37.988 billion in 2014.

It is worth noting that this average price, and therefore the estimate derived from it, is more likely to be too low than too high. Firstly, as already described, a high proportion of the more valuable jade is smuggled and evades Chinese customs, thus pulling down the average price of Myanmar jade as indicated by the Chinese data. Secondly, traders who do present their jade for

legitimate export at the border have no reason to overestimate the value, as this will incur a higher tax bill. Conversely, they will have an incentive to under-declare.

**These results are truly striking: two different methodologies both showing estimates of well over US\$30 billion for Myanmar's jade sector in 2014.**

Finally, it is worth returning to the question of how this Chinese import data sits with Myanmar government production data. The total weight of the \$12.3 billion worth of jade imports was 5.402 million kg, which equates to less than a third of Myanmar's official jade production in 2014. This strongly supports numerous accounts from industry insiders who say 50-80% of jade is smuggled straight over the border into China.<sup>444</sup>

## (F) Adjusting the 2014 jade production estimate based on Emporium data to account for jade sold through local jade fairs

Our estimates above rely on data from the 2014 Emporium about prices of jade, and use these to estimate the size of production for other years. As already noted however, 2014 is an atypical year because two local fairs were also held, selling low quality jade to Myanmar rather than international buyers. Prior to 2014, only one local fair had been held in nine years.

To recap: in contrast to the main emporium, these local fairs are irregular events focused on selling low-grade utility grade jade (in effect the lowest of the low) to the domestic market. The data they yield on prices is not therefore representative of a business which is overwhelmingly focused on trade with the international (Chinese) market.

While we believe that using this local fair data introduces a significant risk of under-estimating jade prices, we have decided to incorporate it rather than simply putting it to one side. As such,

we have recalculated the average price for utility grade jade in 2014 to take into account the sales data we have on the local fair held in October.<sup>445</sup> Since these fairs have typically not been held in the years running up to 2014, we do not undertake a similar recalculation for the 2005-2013 period.

If we combine the local fair data we have with the 2014 Emporium data, this yields a reduced average price of US\$166.95 per kg for utility grade jade. In Table 4, we use this revised figure to recalculate our two valuations of 2014 jade production.

Using the proportions of imperial, commercial and utility jade drawn from 2014 Emporium sales figures, the valuation falls to US\$5,643 billion. However, this estimate is clearly flawed since it falls well below the value of jade imports from Myanmar recorded by Chinese customs in 2014. As set out in Section D above, Chinese trade data on imports from Myanmar records a figure of US\$12.3 billion in 2014 for the category of gemstone that includes – and overwhelmingly comprises – jade. This can effectively be treated as a minimum estimate of Myanmar’s jade sector in that year, moreover one that does not consider the cross-border smuggling which is evidently rampant.

Using the proportions of jade across the three grades employed by Harvard/Proximity, the estimate of production value in 2014 becomes **US\$30,859 billion**. While the Harvard/Proximity split between grades is drawn from qualitative data and is an estimate only, we believe it is more accurate than the one offered by the 2014 Emporium data, given how the latter is distorted by the smuggling of more valuable jade.

In our conclusions, we have chosen to highlight this more conservative estimate of US\$30,859 billion over the US\$34,248 billion figure set out above in Table 3 (column F).

**We consider US\$30,859 billion to be the most reliable estimate of 2014 jade production available, since it is based on the most realistic split between grades of jade and the most conservative price data. Moreover, it still comes in considerably lower than the estimate yielded by the alternative methodology based on Chinese import data which is outlined under (E) above.**

If we combine this revised estimate with the estimated valuations of official production in 2005-2013 using the Harvard/Proximity split between grades (set out in Table 3 column F), the overall estimate for the value of jade production over the past decade becomes **US\$122.8 billion**.

**Table 4: Re-calculation of official production value using sales data from October 2014 local fair<sup>446</sup>**

A	B	C	D	E	F
Year	Volume of jade sold at emporium (in thousand kg) <sup>447</sup>	Total value of sales at emporium (in US\$ millions) <sup>448</sup>	Total annual production (in thousand kg)	Total sector size (2014 Emporium split between grades split) (in US\$ millions)	Total sector size (Harvard/ Proximity split between grades) (in US\$ millions)
2014 (excluding data from local fair)	3,865	US\$3,580	16,684	US\$15,453	US\$34,248
2014 (including data from local fair)	10,943	US\$3,701	16,684	US\$5,643	US\$30,859

## (G) Estimating the value of total production including jade mined but not officially recorded

Neither our 2014 Emporium price data-based production estimates nor the alternative valuation based on Chinese import figures take account of jade which is never officially recorded.

Interviews with industry sources in both China and Myanmar indicate that whilst some jade production may be officially recorded before it is smuggled, a significant proportion is also kept off Myanmar's books altogether (for example, by paying off officials to under-record production).<sup>449</sup> At the same time, industry sources indicate that the smuggling is aimed not only at evading taxes in Myanmar but also those in China, and so smugglers are endeavouring to dodge Chinese border controls as much as Myanmar ones. This means that Chinese trade data under-records jade imports from Myanmar.

It is, however, possible to estimate the value of smuggled jade that is not recorded at the mine

site if we combine official data with information from industry sources. According to industry sources, 50-80% of the total jade produced is smuggled into China. This could mean that as little as 20% of the jade which reaches China enters the country legally.

According to official trade data, just over 72 million kg of jade has been imported to China from Myanmar over the past decade. If we use the upper estimate of 80% of jade being smuggled as a basis for calculations, this would mean that jade recorded in Chinese import figures represents a fifth of the total volume which goes to China from Myanmar. Total production of jade between 2005 and 2014 may therefore be up to 361 million kg.

We can apply the Harvard/Proximity figures on the split between imperial, commercial and utility jade and the average prices extrapolated from the 2014 Emporium data to calculate a value. As Table 5 shows, on this basis we estimate that Myanmar's total production over the past decade – including 'unofficial' / unrecorded jade – could be worth as much as **US\$170.764 billion**.

**Table 5: Estimates of maximum possible sector value**

A	B	C	D	E	F
Year	Official jade imports to China <sup>450</sup> (in million kg)	Maximum estimate of total sector size (using upper industry estimate of 80% unrecorded jade) (in million kg)	Official production in Myanmar in 2005-2014 (in million kg)	Estimated size of unofficially produced jade over 2005-2014 (in million kg)	Maximum estimated sector value (based on volume in C and Harvard/Proximity split between grades) (in US\$ billion)
2005-2014	72.389	361.943	260.269	101.674	US\$170.764

## Additional notes on calculations

- The price we calculated for imperial grade jade is based on the average price of all auction (as opposed to tender) sales at the 2014 Emporium. This is because higher value jade was sold by auction, but we do not have data specifying which lots were imperial grade. We do have full data on which stones

were which grades for the 2015 Emporium. This shows that of the 334 lots offered for auction in 2015, only two were imperial grade jade. It is likely that a similarly small number of lots at the 2014 auction sales were imperial grade, and this in turn suggests that the imperial grade jade price we have estimated for the 2014 Emporium has been dragged down by lower grade lots that were sold by auction that year. This is backed up by one

data point we have for a piece of imperial grade jade sold at the 2014 Emporium by Htoo Group company. This jade was sold for 40 times the price we have estimated for imperial jade based on the 2014 Emporium data set. As such, our calculation of the average price of imperial jade may be a substantial underestimate, and consequently the true value of production may be much higher than our figures indicate.

- As detailed in Chapter 1, price manipulation is widespread at government emporiums. Industry sources indicate that such manipulation is primarily about companies selling to themselves (via proxies or agents) at an artificially low price as means of reducing the taxes that they have to pay. There are also accounts of price inflation either for money laundering purposes or to keep certain categories of jade off the market; however, interviewees suggest that artificially depressing prices is far more prevalent. Again, we do not have sufficient information to take account of these issues in our calculations, and are unable to determine the overall effect of these manipulations on jade prices.
- Sales at the July 2015 Myanmar Gems Emporium fell sharply due, it is thought, to the imposition of a deposit system to discourage buyers from placing winning bids and then failing to make payment. In the absence of a detailed sales breakdown, it is not possible for us to analyse which grades of jade have been impacted by the fall, or what the implications are. For the purposes of this calculation, we assume that the introduction of a deposit impacted all grades of jade equally and does not therefore affect the pricing distribution.

## (H) Estimating the Myanmar government's take of the country's most lucrative natural resource

We have also made a rough estimate of the likely government take from Myanmar's jade sector in 2014.

Our calculation is set out in Table 5, and it is based on the following information and assumptions / estimates:

- Data available on licence fees is extremely limited. According to Myanmar Gems Enterprise (MGE), 937 companies had licences to mine jade in the 2014-2015 Fiscal Year. One industry estimate suggests that only 30% of these companies are likely to operate privately (that is, outside a *kyo thu* arrangements) and therefore be liable for licence payments. Licence-holders can hold up to 50 permits of 1 acre each, and if we assume that 30% of 937 hold an average of 25 acres, this gives a total of 7027.5 acres held under private licence. This estimated acreage aligns with information from other industry sources who have estimated licensed mining acreage at between 12,000 and 35,000 acres, which would yield a median of 23,500 acres.<sup>451</sup> If we use the same estimate of 30% of mines under private licences, we get a figure of 7,050 acres.
- There are huge variations in the possible prices for licences, but we have taken an average price of over 16.5 million kyat for a three year licence based on the average of various data points provided by MGE.<sup>452</sup> Using these figures we have calculated a rough average for licence revenues on an annual basis, which we estimate at US\$5,615.34 per year.
- MGE has provided details of mine site tax revenues for the Financial Year 2013-2014 and we have assumed that this figure remains constant in the Financial Year 2014-2015.

We have reviewed data on companies which operate wholly or partially in the jade sector, and which appear in Myanmar's top commercial and income tax payers lists to calculate approximate tax payments derived from jade. We have calculated their payments based on the tax payment bands that they are listed in, using a median figure for each band.

Table 6: Estimate of Myanmar government jade revenues in 2014

Item	Estimated value (in US\$ millions)
Estimated licence fees (assuming average licence price of US\$5,615.34 per year and 7,027.5 private jade licences)	US\$39.46
Mine site tax revenues (based on FY2013-2014 figure)	US\$6.12
Revenues from 10% sales tax at 2014 Emporium (assuming 30.38% completion rate)	US\$108.77
MGE 40% share of completed <i>a kyo thu</i> sales (estimated) (assuming 30.38% completion rate) <sup>453</sup>	US\$138.93
MEHL and MEC revenues from jade ventures (including joint ventures in which we assume they take a 40% share) (assuming 30.38% completion rate)	US\$38.74
Estimated commercial tax payments by jade businesses (based on FY2013-2014 data)	US\$39.86
Estimated income tax payments by jade businesses (based on FY2013-2014)	US\$2.11
<b>Total</b>	<b>US\$373.99</b>

**Note:** Emporium sales are subject to an additional 1% levy which goes to the Central Committee of Myanmar Gems Emporium. This has not been included as it is not strictly part of the Myanmar state's take of jade revenues. According to Myanmar Gems & Jewellery Entrepreneurs Association, money raised through this levy goes to a fund which is spent on emporium organisation, administration and building maintenance costs as well as "works leading to development of the gem market" and "CSR".

One striking feature of the calculation above is the low level of revenue from the 20% mine site tax, particularly when compared to the US\$108 million in revenue generated by the 10% sales tax at the 2014 Emporium.

We have calculated in Table 7 an estimate of what the mine site tax could generate if it was implemented properly. For the purpose of this calculation, we assume that jade undergoes no significant value add between the mine site and

the emporium (and therefore its value should be essentially unchanged between these locations).

We do not make any adjustment for transportation charges between the mine and emporium as reliable estimates are not available. However, transportation charges are unlikely to account for anywhere near the US\$369.56/kg discrepancy between the tax that should have been collected and the tax actually paid.

Table 7: Discrepancy between actual and estimated potential mine site tax revenue

	Share of production	Average 2014 Emporium Sale Price (per kg)	20% 'Mine Site' Tax (per kg)	Total theoretical tax collections in FY2014 based on 2014 official production (US\$ millions)
Utility	60%	US\$166.95	US\$33.39	US\$334.25
Commercial	35%	US\$2,214	US\$442.78	US\$2,585.56
Imperial	5%	US\$19,492	US\$3,898.39	US\$3,252.04
Total value of properly assessed 20% mine site tax (not including any adjustment for transportation charges or value added between mine site and emporium)				US\$6,171.85
Mine site tax paid				US\$6.12
<b>Estimated MGE mine site tax revenue loss in 2014</b>				<b>US\$6165.73</b>

## Appendix 2: Kachin Development Networking Group: 'Solutions to Current Destructive Natural Resource Development Process and Related Conflicts'

*The following is taken from Chapters V and VI of the Kachin Development Networking Group (KDNG) 'Kachin State Natural Resources Development Policy Discussion Paper' on the constitutional changes required as a basis for equitable and sustainable natural resource management in Kachin State. The full paper, published in June 2015, is available at <http://www.kdng.org/press-release/455-press-statement-of-kdng-kachin-state-natural-resources-development-policy-discussion-paper.html>.*

### Solutions to Current Destructive Natural Resource Development Process and Related Conflicts

#### 1. Immediate Constitutional Reform

A constitution should clearly establish legal rights to the nation's natural resources in order to provide the foundation for proper natural-resources management and development, and social peace. The 2008 constitution must be re-written or replaced to address the issue of natural resources, specifically in the areas of ownership, management, and revenue collection. At the same time, the army must be brought under the control of a civilian government and the state governments must be completely directly elected. Specific measures to integrate natural resources powers into constitutional reform should include:

##### **A) Ensure Kachin State has full ownership of all natural resources and this is written into the federal and state constitutions**

If there are no proper and clear ownership rights to the natural resources in the constitution, problems will arise between the central, state, and local governments and it can lead to renewed conflicts. Only when there is a clear ownership

right will the political situation be resolved, investors will be convinced to invest, and people can improve the quality of their lives. The ownership rights stated in the current 2008 constitution in Chapter 1, Clause 37 (a) must be changed in a federal constitution from: The Union is the ultimate owner of all lands and all natural resources above and below the ground, above and beneath the water and in the atmosphere in the Union to The people of Kachin State are the ultimate owners of all lands and all natural resources above and below the ground, above and beneath the water and in the atmosphere in the State.

In addition, ownership rights for Kachin State should also include the following principles:

- (a) One must have the right to own one's land and property, (and/or) ethnic groups must have the right to common ownership.
- (b) If the property belongs to the people by customary law, all the local residents must be allowed to use it.
- (c) Local people must be granted permission to extract the natural resources on their own land.

##### **B) Ensure Kachin State has full management, legislative, and enforcement powers over natural resource development, including licensing**

Currently the development process is a top-down one handled by the Naypyidaw government and business companies. The local state governments and local people have no right to take part in it. This kind of development program brings more harm than benefit to local people and creates conflict. A "bottom to up" development process engages local people in decision making and provides benefits to the local citizens. If people are not engaged in the process of managing their own natural resources, more political problems

will emerge and peace in the country may be affected. Therefore, the Kachin State government must have the right to manage the natural resources in the state. Moreover, the local government and the local people must get involved in the management. Local constitutionally-based management powers over land and natural resources can protect minorities by bringing decision making power closer to the affected peoples. Specific aspects of management can be divided between the central and state governments, for example certain standards on environment or safety could be set at the national level. Management powers give legislative and executive authority over natural resources; they determine who has ability to make and enforce laws on the development and exploitation of natural resources. In this way, management rights are more important than ownership because the power to legislate and regulate natural-resources development determines the rights, and the limits of the rights, of ownership.

Therefore Clause 37 (b) of Chapter 1 of the current 2008 constitution must be changed in a federal constitution from: "The Union shall enact necessary law to supervise extraction and utilization of State owned natural resources by economic forces" to "The state shall enact necessary law to supervise extraction and utilization of State owned natural resources by economic forces."

Natural resource management rights for Kachin State should be based on the following principles:

- (a) A fully democratically elected Kachin State government must have its own administrative, legislative, and judicial power to manage resources within the state and the right to delegate management powers to local levels of government.
- (b) A fully democratically elected Kachin State government must have the right to manage and administer development plans based on its natural resources.
- (c) The central government and foreign companies must not directly manage resource extraction and related development projects or control the process. The Kachin State government should not be dependent on the central government in this regard but stand on its accord.
- (d) A fully democratically elected Kachin State government may further devolve management powers to township or other local government entities to best address the needs of local populations needs.
- (e) All levels of government must recognize the management of the natural resources by the local people according to their customary law as the situation requires.
- (f) Detailed natural resource management powers must be written into both the federal and Kachin State constitutions.

### **C) Ensure Kachin State has the power to collect revenues from the state's natural resources**

Taxes and revenues on the use of natural resources must be collected by a democratically elected Kachin State government and the process clearly and transparently explained to the residents of the state. If the local and state governments do not use the revenues according to the wishes of local populations, officials can be voted out. In this way, the government will be more transparent and accountable to the needs of local people.

Natural resource revenue rights for Kachin State should be based on the following principles:

- (a) The Kachin State government must collect taxes and revenues from the extraction and use of natural resources and related development projects. The majority of the revenue should remain and be used within Kachin State. A portion can be shared to the central (Union) government for national use.
- (b) The collected tax revenues for Kachin state should be further divided among local government bodies. Every level of government, local, state and union must be democratically elected.
- (c) The Kachin State government must use the revenues to design, implement, and manage social, educational, health, and infrastructure development programs with the collected natural resource taxes. Local government entities should also play a role in determining

such programs.

- (d) The revenue provided to the central (Union) government should support an "equalization fund" to provide revenue to the poorer states of Burma for their health, education and development programs.

The following guidelines should be followed in the collection and distribution of revenues from natural resources:

- (a) People living in the area of natural resource extraction or the related development project must receive a dividend of the profits.
- (b) Tax collection must support the people's economy and reduce their poverty.
- (c) The largest percentage of the profits should not go to foreign investors.
- (d) The local people must be provided employment. Training and job opportunities should be opened to them.
- (e) Working people must be paid a minimum wage which is to be democratically determined within Kachin State to allow sufficient income for their survival.

## 2. Interim Steps

### **A) Halt large scale resource extraction and related development projects during peace process to minimize conflict**

Political resolution, particularly around natural resource management rights, in Kachin State is essential for ending the conflict. If mega development projects are started before political resolution, there will be more conflict between the government and ethnic armed groups and more conflict between the government and local communities. This will have subsequent social

impacts on communities and lead to environmental destruction. Therefore there must be a moratorium on all new projects involving an area larger than 50 hectares.

Large scale mono-crop plantations and factories have been established within the boundaries of the Hugawng Tiger Reserve. Therefore to avoid further exploitation of resources under the charade of a designated conservation area, there must also be a moratorium on the establishment of any conservation areas or parks until constitutional reform is instituted and local governments can properly manage conservation areas.

Existing projects must be re-negotiated under the new constitution.

### **B) Allow and protect unrestricted civil participation**

It is vital that civil society and community-based groups play their role by monitoring the use of natural resources and implementation of the new constitution and laws.

1. Community-based groups must raise awareness among local people to know and understand their rights.
2. The media and other monitoring groups must operate freely to provide information.
3. Local communities must have the right to organize referendums on large scale natural resource development projects to determine their consent.

People must have freedom of expression and the right to protest if the company and government confiscate land, exploits the community, or only consider their own economic profits.

## ENDNOTES

1. Global Witness interview with former official; 2014. (Global Witness interview 256-B).
2. Global Witness interview with jade businessman; 2014. (Global Witness interview 240-D).
3. Chinese trade data taken from CTI (China Trade Institute) and UN Comtrade Database. See Appendix 1 for further details of data used and analysis conducted.
4. See Appendix 1 for details of calculations.
5. World Bank, 'Myanmar profile'; undated, <http://data.worldbank.org/country/myanmar>, last accessed 14 September 2015.
6. Calculations based on: (1) Kachin population estimate of 1,442,235. UNICEF, 'Kachin State'; undated, [http://www.unicef.org/myanmar/Kachin\\_State\\_Profile\\_Final\(1\).pdf](http://www.unicef.org/myanmar/Kachin_State_Profile_Final(1).pdf), last accessed 19 August 2015; and (2) Health figures taken from Myanmar government budget for the financial year 2014-2015.
7. Roger Keverne (Ed.), 'Jade', Anness Publishing; 1991, updated 2010, p.268.
8. Ash Center for Democratic Governance and Innovation, Harvard Kennedy School/Proximity Designs/Rajawali Foundation Institute for Asia, 'Creating a Future: Using Natural Resources for New Federalism and Unity'; July 2013, <http://ash.harvard.edu/links/creating-future-using-natural-resources-new-federalism-and-unity>; last accessed 1 August 2015.
9. Global Witness interview with jade businessman; 2014. (Global Witness interview 135-B).
10. Under s.31 of Myanmar's 1995 Gemstone Law, a licence holder who pays the 10% tax on emporium jade sales is exempted from paying other taxes. Despite this exemption, however, according to information provided by MGE and a current jade licence holder, under the 1995 Union Tax Law a 15% commercial tax is also payable. In addition, companies are subject to a 25% income tax on net profits earned in kyat.
11. According to one estimate from an industry leader, around 70% of jade mining companies operate through 60%/40% joint ventures with the state-owned enterprise MGE. In addition, as set out in Chapter 2, various army companies also hold stakes in jade mining operations, again on a 60%/40% basis.
12. See Appendix 1 for calculations.
13. Myanmar government budget for the financial year 2014-15.
14. World Bank, 'Myanmar: Ending poverty and boosting shared prosperity in a time of transition. A Systematic Country Diagnostic'; November 2014, [http://www.worldbank.org/content/dam/Worldbank/document/EAP/Myanmar/WBG\\_SCD\\_Full\\_Report\\_English.pdf](http://www.worldbank.org/content/dam/Worldbank/document/EAP/Myanmar/WBG_SCD_Full_Report_English.pdf), last accessed 2 August 2015.
15. *ibid.*
16. According to Physicians for Human Rights, the monthly running cost for three health clinics in Kachin State including rent, staff (10 people including medical staff and administrators), medicine and communications amounts to US\$4,900.
17. Global Witness interview with jade businessman; 2015. (Global Witness interview 135-H).
18. For further details on the EITI, see <http://eiti.org>. It should be noted that Global Witness has a representative sitting as an alternate member of the EITI International Board which oversees the scheme globally.
19. EITI International Secretariat, 'The EITI Standard', EITI; 11 July 2013, [https://eiti.org/files/English\\_EITI%20STANDARD\\_11July\\_0.pdf](https://eiti.org/files/English_EITI%20STANDARD_11July_0.pdf), last accessed 19 August 2015.
20. EITI International Secretariat, 'Civil Society Protocol', EITI; 1 January 2015; [https://eiti.org/files/EITI\\_CivilSocietyProtocol\\_Jan2015.pdf](https://eiti.org/files/EITI_CivilSocietyProtocol_Jan2015.pdf), last accessed 19 August 2015.
21. Ministry of Foreign Affairs, Liberia, 'An Act Establishing the Liberia Extractive Industries Transparency Initiative'; 10 July 2009, <http://www.leiti.org.lr/uploads/2/1/5/6/21569928/act.pdf>, last accessed 19 August 2015. Moore Stephens, 'Liberia Extractive Industries Transparency Initiative (LEITI) Post Award Process Audit, Final Report'; May 2013, [http://www.leiti.org.lr/uploads/2/1/5/6/21569928/leiti\\_post\\_award\\_process\\_audit\\_final\\_report.pdf](http://www.leiti.org.lr/uploads/2/1/5/6/21569928/leiti_post_award_process_audit_final_report.pdf), last accessed 19 August 2015.
22. Global Witness, 'Azerbaijan Anonymous'; December 2013; [https://www.globalwitness.org/sites/default/files/library/azerbaijan\\_anonymous\\_lr.pdf](https://www.globalwitness.org/sites/default/files/library/azerbaijan_anonymous_lr.pdf), last accessed 19 August 2015. Human Rights Watch, 'Reporters' Guide: 2015 European Games in Baku, Azerbaijan'; 2015, [http://www.hrw.org/sites/default/files/related\\_material/Azerbaijan\\_Reporter's\\_Guide.pdf](http://www.hrw.org/sites/default/files/related_material/Azerbaijan_Reporter's_Guide.pdf), last accessed 19 August 2015.
23. Htoo International Industry Company & Htoo Gems and Jewellery Company, 'Presentation on Jade Mining Operations'; 13 March 2015. Letter from Kyauk Seinn Nagar (Gems) Co., Ltd to Global Witness; 2015.
24. EITI, 'Myanmar admitted as EITI Candidate'; 2 July 2014, <https://eiti.org/news/myanmar-admitted-eiti-candidate>, last accessed 19 August 2015.
25. Global Witness interviews with MGE; 2014 and 2015.
26. Global Witness interview with jade businessmen and with jade traders in Mandalay; 2015. (Global Witness interviews 69, 124-B and 155-156).
27. Global Witness interviews with jade businessmen, army company source and with Mandalay jade traders; 2015. (Global Witness interviews 155-156, 205-B and 258).
28. Global Witness interview with MGE; 2015. Letter from MGE to Global Witness.
29. Global Witness interview with MGE; 2014.
30. *ibid.*

31. Global Witness interview with former official; 2014. (Global Witness interview 256-A).
32. Global Witness interview with representatives of the MGJEA; 2015.
33. Letter from MGE to Global Witness; 2015.
34. Information provided to Global Witness by industry representative. (Global Witness reference 125).
35. Letter from MGE to Global Witness. Global Witness interviews with jade businessmen; 2015. (Global Witness interviews 218-B and 286).
36. Letter from MGE to Global Witness. Global Witness interview with MGE; 2015.
37. Please see Chapter 2, Part 2 (Army Companies) for further information on concession share arrangements with army companies.
38. Global Witness interview with MEHL; 2015. Global Witness interview with MGE; 2014.
39. Global Witness interviews with seven jade businessmen and an employee of MEHL; 2014 and 2015. (Global Witness interviews 6, 14, 58, 135, 258, 384, 472 and 473).
40. Letter from MGE to Global Witness; 2015.
41. Global Witness interview with representative of MGE; 2014.
42. Ministry of Mines, 'Statement of the Ministry of Mining (121/99)', 1 October 1999. [Translated from Myanmar language to English by Global Witness.]
43. Global Witness meeting with MGE; 2015.
44. Letter from MGE to Global Witness; 2015.
45. Global Witness interview with former official; 2015. (Global Witness interview 256-B).
46. Global Witness interview with jade businessman; 2015. (Global Witness interviews 135/137-A).
47. Global Witness interview with jade businessman; 2015. (Global Witness interview 218-B).
48. Global Witness interview with jade businessman; 2014. (Global Witness interview 14-A).
49. Global Witness interview with jade businessman; 2015. (Global Witness interview 135-A).
50. Global Witness interview with jade businessman; 2015. (Global Witness interview 384-B).
51. Global Witness interview with jade businessman; 2014. (Global Witness interview 241-B).
52. Global Witness interview with jade businessman; 2015. (Global Witness interview 6-C).
53. *ibid.*
54. Global Witness interview with former jade businessman; 2014. (Global Witness interview 243-C).
55. Global Witness interviews with former and current jade businessmen; 2014 and 2015. (Global Witness interviews 218-B and 243-C).
56. Global Witness interview with former jade businessman; 2014. (Global Witness interview 243-C).
57. Global Witness interview with jade businessman; 2015. (Global Witness interview 135/137-A).
58. Global Witness interview with former jade businessman; 2014. (Global Witness interview 243-C).
59. Global Witness interview with jade businessman; 2015. (Global Witness interview 218-B).
60. Global Witness interview with former jade businessman; 2014. (Global Witness interview 243-C).
61. Global Witness interview with jade businessman; 2014. (Global Witness interview 241-B).
62. Global Witness interview with jade businessman; 2014. (Global Witness interview 310).
63. Global Witness interview with former official; 2014. (Global Witness interview 256-A).
64. Global Witness interview with jade businessman; 2015. (Global Witness interview 218-B).
65. Global Witness interview with former jade businessman; 2014. (Global Witness interview with 243-C).
66. Global Witness interview with jade businessman; 2014. (Global Witness interview 241-B).
67. Letter from MGE to Global Witness. Global Witness interviews with three jade businessmen; 2014 and 2015. (Global Witness interviews 136-D, 136-E and 218-B).
68. Global Witness interviews with representatives of MGE; 2015.
69. Letter from MGJEA to Global Witness; 2015.
70. According to MGE, jade can also be sold at the Mogoke Htaa Pwe Gems market and the Yangon Gems Market. In addition, as set out in Chapter 3, a new market for very low-grade jade has recently been established in Kachin State. Letters from MGE, MGJEA and Kyauk Seinn Nagar (Gems) Co. Ltd to Global Witness; 2015. Global Witness meeting with MGJEA; 2015.
71. Global Witness interviews with representatives of MGE; 2015.
72. Global Witness interviews with representatives of MGE; 2014.
73. Myanmar Gemstone Law 1995, s.17.

74. Global Witness interview with representative of jade company; 2015. (Global Witness interview 124-B).
75. *ibid.*
76. Global Witness interviews with jade traders, two jade businessmen and the employee of a jade company; 2015. (Global Witness interviews 124, 54-AG, 14-G and 427).
77. Global Witness interview with jade businessman; 2014. (Global Witness interview 14-G).
78. Global Witness interview with former jade businessman; 2015. (Global Witness interview 54-AG).
79. Global Witness interviews with an official and with three jade businessmen; 2014 and 2015. (Global Witness interviews 14-G, 54-AG, 56 and 124-B).
80. Global Witness interview with prominent jade businessman; 2015. (Global Witness interview 218).
81. Global Witness interviews with two jade businessmen; 2015. (Global Witness interviews 218 and 384).
82. Bertil Lintner and Michael Black, 'Merchants of Madness: The Methamphetamine Explosion in the Golden Triangle', Silksworm Books, Chapter 6; April 2009. Global Witness interview with former official; 2014. (Global Witness interview 256).
83. Jade businessmen, traders and a KIA/KIO official interviewed by Global Witness in Myanmar and China gave consistent accounts of companies selling some jade at the official emporium whilst smuggling the rest directly to China. Three jade businessmen estimated that "big companies smuggle at least 50% of the good jade they produce", and a fourth that "large companies ... carry... more than 50% [illegally]". A prominent jade mine owner estimated that "60-70% goes straight to the border" and another that "80% of jade from Hpakant is smuggled", while an experienced jade businessman and trader said that since 2011 50% of jade is typically smuggled. One Chinese jade trader suggested that "80% of production is smuggled" whilst another said that "outside trade is more than 5-10 times legal trade". A KIA/KIO official stated that 80% of jade is smuggled out and sold on the black market. Only one interviewee gave an estimate of less than half of jade being smuggled, but he went on to explain that the majority of legal sales are subject to price manipulation and tax evasion (Global Witness interviews 6-C, 47, 135-G, 218, 259-260, 378/243/263-B, 384-A and 411). See also Eleven, 'Timber, jade account for more than half of smuggled goods seized'; 22 October 2014.
84. The data in this map is based on interviews with seven jade businessmen and one civil society representative; 2014 and 2015. (Global Witness interviews 47, 101, 142, 234, 350, 352, 353 and 377).
85. A range of prominent and smaller scale jade businessmen and traders and a KIA/KIO official explained that high-value jade goes straight to China, with a few stones going to the emporium for show. Typically, lower grade stones go to the emporium because they are bulky and harder to smuggle. In one incident described to Global Witness, a small-scale jade businessman weighed up the costs of selling a jade boulder at the emporium and smuggling it to China. Because the latter would have cost 40 million kyat (approximately US\$40,000), and the jade piece was medium quality commercial grade, he decided that using the official emporium sale would yield the better return. (Global Witness interviews 14-A, 14-G, 54-AI, 259 and 287).
86. Sales catalogue for the Fifty-Second Myanmar Gems Emporium in 2015. [Translated from Myanmar language to English by Global Witness.]
87. Wu Dingming, 'A Panoramic View of Chinese Culture', Simon & Schuster; May 2014.
88. The British Museum, 'Chinese Jade', undated, [http://www.britishmuseum.org/explore/online\\_tours/asia/chinese\\_jade/chinese\\_jade.aspx](http://www.britishmuseum.org/explore/online_tours/asia/chinese_jade/chinese_jade.aspx), last accessed 2 June 2014. Celine Ge/AFP, 'Bubble Trouble hits Hong Kong jade market'; 16 September 2013, <http://www.chinapost.com.tw/business/asia/hong-kong/2013/09/16/389014/Bubble-trouble.htm>, last accessed 2 June 2015.
89. Global Witness interview with jade businessman; 2014. (Global Witness interview 142-A).
90. Jeremy Page and Brian Spegele, 'Chinese Communist Party Ousts a Former Top General', Wall Street Journal; 30 June 2014, <http://www.wsj.com/articles/chinese-communist-party-ousts-a-former-top-general-on-bribe-taking-allegations-1404126279>, last accessed 31 July 2015. The Economist, 'Rank and vile: Xi Jinping flexes his muscle against army corruption'; 14 February 2015, <http://www.economist.com/news/china/21643225-xi-jinping-flexes-his-muscle-against-army-corruption-rank-and-vile>, last accessed 31 July 2015. China Times, 'Fallen PLA general Xu Caihu dies of cancer prior to trial'; 16 March 2015, <http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20150316000079&cid=1101>, last accessed 31 July 2015. Reuters, 'Former top China military official hoarded cash, jade in basement: Phoenix'; 20 November 2014; <http://www.reuters.com/article/2014/11/20/us-china-politics-corruption-idUSKCN0J412Q20141120>, last accessed 31 July 2015. What's on Weibo, 'Money, Money, Money: General Xu Caihou's House Filled With Cash & Jade'; 20 November 2014; <http://www.whatsonweibo.com/money-money-money-general-xu-caihou-house-filled-with-cash-jade/>, last accessed 31 July 2015.
91. Li Qian, 'Craving for gemstone leads to deputy governor's downfall', Shanghai Daily; 16 December 2014, <http://www.shanghaidaily.com/national/Craving-for-gemstone-leads-to-deputy-governors-downfall/shdaily.shtml>, last accessed 5 August 2015. South China Morning Post, 'Chinese official traded influence for jade in cash-free graft case'; 8 January 2014, <http://www.scmp.com/news/china/article/1400580/chinese-official-traded-influence-jade-cash-free-graft-case>, last accessed 5 August 2015. South China Morning Post, 'Provincial official Ni Fake jailed for 17 years over multimillion dollar jade bribes'; 1 March 2015, <http://www.scmp.com/news/china/article/1726392/provincial-official-jailed-17-years-over-multimillion-dollar-jade-bribes>, last accessed 5 August 2015. Dan Levin, 'A Corruption Case Laden With Jade', New York Times; 15 December 2014, [http://sinosphere.blogs.nytimes.com/2014/12/15/a-corruption-case-laden-with-jade/?\\_r=0](http://sinosphere.blogs.nytimes.com/2014/12/15/a-corruption-case-laden-with-jade/?_r=0), last accessed 5 August 2015. Harrison Jacobs, 'Here's the ridiculous loot that's been found with corrupt officials', Business Insider; 22 January 2015, <http://uk.businessinsider.com/the-ridiculous-loot-thats-been-found-with-corrupt-chinese-officials-2015-1?r=US&IR=T>, last accessed 5 August 2015. Tom Philips, 'China executes Ferrari-loving billionaire gangster', The Telegraph; 9 February 2015, <http://www.telegraph.co.uk/news/worldnews/asia/china/11399732/China-executes-Ferrari-loving-billionaire-gangster.html>, last accessed 5 August 2015. Benjamin Kang Lim, David Lague and Charlie Zhu, 'Special Report: The power struggle behind the corruption crackdown', Reuters; 23 May 2015, <http://www.reuters.com/article/2014/05/23/us-china-corruption-special-report-idUSBREA4M00120140523>, last accessed 5 August 2015.
92. Global Witness interviews with jade businessman and with local community leader; 2014 and 2015. (Global Witness interviews 142-C and 242).
93. Global Witness interviews with two prominent and small-scale jade businessmen, a local official, a former Ministry of Mines official, a former jade company security guard, a Buddhist monk and two parliamentarians; 2014. (Global Witness interviews 14-A, 142-C, 239-C, 243-A, 256, 323, 326 and 339).
94. Global Witness interviews with two businessmen working with Chinese companies/backers; 2014. (Global Witness interviews 311-B and 320).
95. Global Witness interview with jade businessman; 2014. (Global Witness interview 14-B).
96. *ibid.*
97. Ministry of Mines, 'Jade mine tract areas map for phatsat [joint venture] mining and Myanmar Gems and Jewellery Trading Enterprise: Hpakant, Lonekhin and Ta-mahkan regions'; 8 April 1991.
98. Global Witness interviews with former and current jade businessmen; 2014 and 2015. (Global Witness interviews 202-A and 218-B).

99. Global Witness interview with jade industry representative; 2014. (Global Witness interview 135-A).
100. Global Witness interviews with representative of machine supplier and with jade businessmen; 2015. (Global Witness interviews 416, 6-C and 286.).
101. Global Witness interviews with machine company representative and jade businessman; 2015. (Global Witness interviews 65 and 416).
102. Global Witness interviews with two jade businessmen; 2015. (Global Witness interviews 6-C and 65).
103. Letter from MGE to Global Witness. This states that 8,491 lots were sold at the 50th gemstone emporium in 2013, for 2,403,216,267 euros. Payment was received for 6,971 lots in the amount of 1,317,916,432 euros.
104. The sum given here in US dollars is based on the conversion rate of 1.3596 US dollars to the euro which was the average daily exchange rate across the days that the 2014 Myanmar Gems Emporium took place, <http://www.oanda.com/currency/converter/>.
105. The sum given here in US dollars is based on the conversion rate of 1.3187 US dollars to the euro which was the average daily exchange rate across the days that the 2013 Myanmar Gems Emporium took place, <http://www.oanda.com/currency/converter/>.
106. International Human Rights Law Clinic at Harvard Law School, 'Crimes in Burma'; 2009, <http://hrp.law.harvard.edu/wp-content/uploads/2009/05/Crimes-in-Burma.pdf>, last accessed 19 August 2015. International Human Rights Law Clinic at Harvard Law School, 'Legal Memorandum: War Crimes and Crimes against Humanity in Eastern Myanmar'; November 2014, <http://hrp.law.harvard.edu/wp-content/uploads/2014/11/2014.11.05-IHRC-Legal-Memorandum.pdf>, last accessed 19 August 2015. Benedict Rogers, 'Than Shwe – unmasking Burma's Tyrant', Chapter 4, Silksworm Press; 2010.
107. Jared Ferrie / Reuters, 'Photo of Myanmar's reclusive former dictator Than Shwe surfaces on Facebook'; 27 March 2015, <http://www.independent.ie/world-news/asia-pacific/photo-of-myanmars-reclusive-former-dictator-than-shwe-surfaces-on-facebook-31099311.html>, last accessed 19 August 2015. Min Zin / New York Times, 'Return of the Myanmar Military?'; 17 November 2014, [http://www.nytimes.com/2014/11/18/opinion/return-of-the-myanmar-military.html?\\_r=0](http://www.nytimes.com/2014/11/18/opinion/return-of-the-myanmar-military.html?_r=0), last accessed 19 August 2015. Bertil Lintner / Foreign Policy, 'The Military's Still in Charge'; <http://foreignpolicy.com/2013/07/09/the-militarys-still-in-charge>, last accessed 20 August 2015.
108. Larry Jagan / Bangkok Post, 'Thein Sein in Palace Coup to Boost Support'; 14 August 2015, <http://www.bangkokpost.com/opinion/opinion/655372/thein-sein-in-palace-coup-to-boost-support>, last accessed 19 August 2015.
109. *ibid.*
110. Global Witness interview with political analyst; 2015. (Global Witness interview 381).
111. Global Witness interview with Ministry of Mines official; 2015. (Global Witness interview 54-D).
112. Global Witness interview with long-time Myanmar commentator; 2015. (Global Witness interview 413).
113. DICA records for Kyaing International and Kyaing International Gems downloaded in November 2014 register Win Tin to the address 1000/A Shwe Hninsi St, Yangon. This is the same address as the one recorded for Kyaing San Shwe, Thant Zaw Shwe and Htun Naing Shwe's wife Khin Thanda in the DICA database entry for Naing Group Syndicate and for Thant Zaw Shwe in the list of directors for Myanmar Naing Group Gems (both records retrieved October 2014); DICA record for Kyaing International Gems Co. Ltd and Kyaing International Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 3 November 2014 (these records are no longer available in full form). DICA record for Naing Group Syndicate Co. Ltd and Myanmar Naing Group Gems Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015.
114. Communication from jade industry expert group; 2014. Global Witness interview with community leader; 2014. (Global Witness interview 242).
115. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of mid-2014); MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of mid-2014). Kachin Independence Organisation register of jade mining companies 'Maw Sizar block' (in use as of 2014).
116. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of mid-2014); MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of mid-2014).
117. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of mid-2014); MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of mid-2014). Kachin Independence Organisation register of jade mining companies 'Wah Kye Maw' (in use as of 2014).
118. MGE, 'Map Showing Hpakant Treasure Land and related blocks' (in use as of mid-2014).
119. MGE, 'Hpakant Treasure Land and related blocks' map (in use as of end of 2012). MGE, 'Map Showing Hpakant Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012).
120. MGE, 'Map Showing Hpakant Treasure Land and related blocks' (in use as of mid-2014). MGE, 'Hpakant Treasure Land and related blocks' map (in use as of end of 2012).
121. MGE, 'Map Showing Hpakant Treasure Land and related blocks' (in use as of mid-2014). MGE, 'Map Showing Hpakant Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012).
122. MGE, 'Gwi Hkar Treasure Land and related blocks' map (in use as of mid-2015).
123. MGE, 'Map Showing Hpakant Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012).
124. Myanmar Gems Emporium official sales figures; 2013 and 2014.
125. Communication from jade industry expert group; 2014. Global Witness interviews with a community leader, a jade company employee, a KIA/KIO advisor and three jade businessmen; 2014 and 2015. (Global Witness interviews 142-B, 218-B, 242, 312, 324 and 338).
126. Global Witness interviews with two jade businessmen; 2014 and 2015. (Global Witness interviews 177-B and 218-B).
127. Up until at least October 2014, DICA registry records showed that Kywe Wa Sone / Richest Gems shared a director, Tin Win, with Tet Kham Gems. By September 2015, however, Tin Win no longer appeared on the Kywe Wa Sone / Richest Gems listing. In DICA registry records for Tet Kham Gems, Aik Haw is listed under the alias Aung Hein. Aik Haw is profiled in the section of this report about companies linked to the United Wa State Army. Global Witness interview with international expert on the narcotics industry; 2015. (Global Witness interview 296-A). DICA records for Tet Kham Gems Co. Ltd, retrieved from <http://dica.gov.mm.x-aas.net>; 6 September 2015.
128. DICA record for Richest Gems Co. Ltd and Tet Kham Gems and Jewellery Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. DICA, 'Company Information Report'; June 2013. U.S. Department of The Treasury, 'SDN List by Country', <http://www.treasury.gov/ofac/downloads/ctrylst.txt>, last accessed 19 August 2015. U.S. Treasury Office of Foreign Assets Control, 'Wei Hsueh Kang United Wa State Army Financial Network'; November 2008, [http://www.treasury.gov/resource-center/sanctions/Programs/Documents/wa\\_chart\\_11292008.pdf](http://www.treasury.gov/resource-center/sanctions/Programs/Documents/wa_chart_11292008.pdf), last accessed 13 August 2015.

129. Global Witness observations and interviews with local politicians and residents; 2015. (Global Witness interviews 382, 383 and 424).
130. Global Witness interviews with a jade company consultant, a jade businessman and a humanitarian worker; 2014 and 2015. (Global Witness interviews 202-E, 236-B, 378).
131. Global Witness interview with employee of jade mining company; 2014. (Global Witness interview 72-B). Communication from KDNG, March 2015.
132. BBC, 'Burma leader's lavish lifestyle aired'; 2 November 2006, <http://news.bbc.co.uk/2/hi/asia-pacific/6109356.stm>, last accessed 12 April 2015. Benedict Rogers, 'Than Shwe – unmasking Burma's Tyrant', Chapter 5, Silksworm Press; 2010.
133. Global Witness interviews with two political analysts; 2014 and 2015. (Global Witness interviews 127-B/C and 197-D). Kyaw Hsu Mon / The Irrawaddy, 'Aung Thaung Blacklisted for Links to Anti-Muslim Violence: Analysts'; 3 November 2014, <http://www.irrawaddy.org/burma/aung-thaung-blacklisted-links-anti-muslim-violence-analysts.html>, last accessed 12 April 2015.
134. The leaked video of the wedding is available on You Tube, in a series of clips starting at <https://www.youtube.com/watch?v=j8-2Ggd5Ng0> (last accessed 4 October 2015). Jonathan Watts, 'Burmese outraged at lavish junta wedding', The Guardian; 2 November 2006, <http://www.theguardian.com/world/2006/nov/02/burma.jonathanwatts>; last accessed 4 October 2015. Ed Cropley, 'Lavish wedding video sparks outrage', Reuters; 2 November 2006, <http://uk.reuters.com/article/2006/11/02/tech-myanmar-wedding1-dc-idUKBKK1738220061102>; last accessed 4 October 2015.
135. Global Witness interview with long-time Myanmar commentator; 2015. (Global Witness interview 413).
136. Shwe Yinn Mar Oo, Ko Ko Gyi and Thomas Kean / Myanmar Times, 'Opposition MPs cleared of fraud'; 20 June 2011, <http://www.mmtimes.com/index.php/national-news/2535-opposition-mps-cleared-of-fraud.html>, last accessed 25 August 2015. Maung Aung Myoe, 'Building the Tatmadaw: Myanmar Armed Forces Since 1948', Institute of Southeast Asian Studies; 2009, p.231. Global Witness interview with humanitarian worker; 2014. (Global Witness interview 202-B).
137. Global Witness interviews with a KIA/KIO representative, a civil society organisation representative, a civil society organisation, a MEHL representative and four jade businessmen; 2014 and 2015. (Global Witness interviews 395-398, 185-A, 18-J, 197-B, and 14-B, 349, 6-C, 310). See also Mandy Sadan, 'Being and Becoming Kachin', the British Academy / Oxford University Press; 2013, p.338, footnote 19.
138. Global Witness interviews with four jade businessmen; 2014 and 2015. (Global Witness interviews 14-B, 218, 349 and 263).
139. DICA record for Myanmar Win Gate Gems and Jewellery Mining Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 3 November 2014 (this record is no longer available in full form). Myanmar Win Gate 'Welcome to MyanmarWingate.com', <http://www.myanmarwingate.com>, last accessed 2 October 2015.
140. DICA record for Myanmar Win Gate Gems and Jewellery Mining Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 3 November 2014 (this record is no longer available in full form). DICA record for Myanmar Win Gate Gems and Jewellery Mining Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. DICA, 'Company Information Report'; June 2013. European Commission, 'Commission Regulation (EU) No 411/2010'; 10 May 2010, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010R0411>, last accessed 9 April 2015.
141. European Commission, 'Commission Regulation (EU) No 411/2010'; 10 May 2010, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010R0411>, last accessed 9 April 2015.
142. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of mid-2014); MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of mid-2014). KIO register of jade mining companies 'Wah Kye Maw' (in use as of 2014). MGE, 'Gwi Hkar Treasure Land and related blocks' map (in use as of mid-2015).
143. Meeting with MEHL; 2015.
144. MGE, '51st Myanmar Gems Emporium Sold Lot List'; 2014. The sum given here in U.S. dollars (and in all figures for June 2014) is based on the conversion rate of 1.3596 U.S. dollars to the euro which was the average daily exchange rate across the days that the 2014 Myanmar Gems Emporium took place, <http://www.oanda.com/currency/converter/>.
145. Myanmar Gems Emporium official sales figures 2014.
146. For an uploaded version of Minister Ohn Myint's speech, see <https://www.youtube.com/watch?v=SxH7M9H1oDw>, last accessed 25 August 2015.
147. DVB, 'Magwe demands 'Slapper' Ohn Myint step down'; 11 February 2014, <http://www.dvb.no/news/magwe-demands-slapper-ohn-myint-step-down-burma-myanmar-2/37072>, last accessed 25 August 2015.
148. Larry Jagan / Asia Times, 'Electoral test for Myanmar reforms', 31 March 2012, [http://www.atimes.com/atimes/Southeast\\_Asia/NC31Ae01.html](http://www.atimes.com/atimes/Southeast_Asia/NC31Ae01.html), last accessed 28 August 2015. Myanmar Pyithu Hluttaw, 'Maung Maung Thein profile' <http://www.pyithuhluttaw.gov.mm/?q=representative%2F%E1%80%A6%E1%80%B8%E1%80%B1%E1%80%99%E1%80%AC%E1%80%84%E1%80%B9%E1%80%B1%E1%80%99%E1%80%AC%E1%80%84%E1%80%B9%E1%80%9E%E1%80%AD%E1%80%99%E1%80%B9%E1%80%B8>, last accessed 28 August 2015.
149. Larry Jagan / Mizzima News, 'Splits emerge in Burma's army over country's roadmap'; 21 March 2008, <http://archive-2.mizzima.com/edop/analysis/323-splits-emerge-in-burmas-army-over-countrys-roadmap.html>, last accessed 28 August 2015. Global Witness interview with political analyst; 2015. (Global Witness interview 381). Global Witness research, interview with industry source; August 2001 / Global Witness, 'A Conflict of Interests', p.43; 2013, <https://www.globalwitness.org/sites/default/files/import/03sep3%20Conflict%20of%20Interests%2030-59.pdf>.
150. Global Witness interviews with two jade businessmen; 2015. (Global Witness interviews 218-B and 311). MGE, 'Hpakant Treasure Land and related blocks' map (in use as of mid-2014). MGE, 'Map Showing Hpakant Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012). MGE, 'Map Showing Hpakant Treasure Land and related blocks' (in use as of mid-2014).
151. Global Witness interview with journalist; 2015. (Global Witness interview 410).
152. DICA record for Myat Yamon Trading Co. Ltd, Myat Yamon Gems Co. Ltd and Myo Nwe Gems Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Equivalent records downloaded from the DICA online database <http://dica.gov.mm.x-aas.net/>; October 2015. Communication from courier company; 2015.
153. Myanmar Pyithu Hluttaw, 'Maung Maung Thein profile' <http://www.pyithuhluttaw.gov.mm/?q=representative%2F%E1%80%A6%E1%80%B8%E1%80%B1%E1%80%99%E1%80%AC%E1%80%84%E1%80%B9%E1%80%B1%E1%80%99%E1%80%AC%E1%80%84%E1%80%B9%E1%80%9E%E1%80%AD%E1%80%99%E1%80%B9%E1%80%B8>, last accessed 17 April 2015.
154. Min Thein's NRC number can be identified via DICA records for Thone Pwint Hsain Co. Ltd timber company, which previous Global Witness investigations have revealed he controls: Global Witness research, interview with industry source; August 2001 / Global Witness, 'A Conflict of

- Interests'; 2013, p.43, <https://www.globalwitness.org/sites/default/files/import/03sep3%20Conflict%20of%20Interests%2030-59.pdf>. In Global Witness' 2003 report, the company's name is spelled Thone Pwint Saing Co. Ltd. We believe the divergence in spelling in the DICA records relates to a difference in the system used for transcribing the Myanmar name into Roman letters. DICA record for Myo Nwe Gems & Jewellery Co. Ltd and Thone Pwint Hsain Co. Ltd, <http://dica.gov.mm.x-aas.net>, last accessed 27 August 2015.
155. Global Witness interview with civil society organisation; 2015. (Global Witness interview 18-J). Communication from Myanmar company; 2015.
  156. Letter to Global Witness from Nay Aung; 2015.
  157. Global Witness interviews with jade businessman, a civil society organisation and local resident; 2014 and 2015. (Global Witness interview 263 and 18-J).
  158. Film footage provided by local resident; 2015. Footage of the same incident (which does not identify the site as a Myat Yamon mine) can also be accessed at Radio Free Asia, 'Unbridled Jade Mining Triggers Deadly Landslides in Myanmar', <https://www.youtube.com/watch?v=rWd1PSluDe0>, last accessed 5 October 2015. Global Witness interviews with jade businessman and local residents; 2015. (Global Witness interviews 404 and 128-G). Xinhua, 'Nearly 70 missing in landslide in Myanmar's jade mining area'; 9 April 2015, [http://news.xinhuanet.com/english/2015-04/09/c\\_134138004.htm](http://news.xinhuanet.com/english/2015-04/09/c_134138004.htm), last accessed 5 October 2015.
  159. Global Witness interview with former official; 2014. (Global Witness interview 256-B).
  160. Communication from Ministry of Mines; 2015. MGE, 'Map Showing Hpakant Treasure Land and related blocks' (in use as of mid-2014). Global Witness interview with political analyst; 2015. (Global Witness interview 381). DICA record for Shwe Innwa Gems Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 30 August 2015. DICA record for Shwe Innwa Gems Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Euro-Burma Office, 'Political Monitor / Official Media / 25 February to 16 March 2012', p.8-9, [https://euroburmaoffice.s3.amazonaws.com/filer\\_public/84/e7/84e7871d-613b-41f9-b7de-d2e023b730da/pm\\_no\\_7\\_-\\_27-03-12.pdf](https://euroburmaoffice.s3.amazonaws.com/filer_public/84/e7/84e7871d-613b-41f9-b7de-d2e023b730da/pm_no_7_-_27-03-12.pdf), last accessed 11 June 2015.
  161. DICA, 'Company Information Report'; June 2013. Communication from courier company; 2015. U.S. Embassy Rangoon, 'Burma: State-Owned Enterprise Demonstrates Military's Hold on Economy'; 6 February 2009, [https://www.wikileaks.org/plusd/cables/09RANGOON83\\_a.html](https://www.wikileaks.org/plusd/cables/09RANGOON83_a.html), last accessed 31 August 2015. Mizzima News, 'Junta-controlled firm opens shopping centre in Rangoon'; 11 October 2010, <http://archive-2.mizzima.com/business/4432-junta-controlled-firm-opens-shopping-centre-in-rangoon.html>, last accessed 31 August 2015.
  162. Global Witness meeting with MEHL. DICA record for Myanmar Imperial Jade (Gems & Jewellery) Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015.
  163. Courier company report; 2015.
  164. US Embassy Rangoon, 'Update On Myanmar Economic Holdings' Activities'; 6 February 2009, [https://search.wikileaks.org/plusd/cables/09RANGOON77\\_a.html](https://search.wikileaks.org/plusd/cables/09RANGOON77_a.html), last accessed 4 October 2015. DICA record for Myanmar Imperial Jade (Gems & Jewellery) Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Global Witness meeting with MEHL; 2015.
  165. Myanmar Gems Emporium official sales figures 2013 and 2014.
  166. In English language publications, MEHL spells its name Myanma Economic Holdings Limited, without an 'r' at the end of Myanmar. By contrast, the other big army company, Myanmar Economic Corporation, spells Myanmar with an 'r'.
  167. Communication from Ministry of Mines; 2015. Global Witness interviews with representative of MEC and political analyst; 2015. (Global Witness interviews 302 and 483). Myanmar Gems Emporium official sales figures 2013 and 2014. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of mid-2014). MGE, 'Map Showing Hpakant Treasure Land and related blocks' (in use as of mid-2014). Maung Aung Myoe, 'Building the Tatmadaw: Myanmar Armed Forces Since 1948', Institute of Southeast Asian Studies; 2009, p.186. DICA record for Shwe Innwa Gems Co. Ltd and Northern Star Gems and Jewellery Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 30 August 2015. DICA record for Shwe Innwa Gems Co. Ltd and Northern Star Gems and Jewellery Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015.
  168. Global Witness interview with former MEHL employee; 2014. (Global Witness interview 484). Sean Turnell, 'Burma's Economy and the Struggle for Reform' in Mikael Gravers and Flemming Ytzen (eds) 'Burma / Myanmar – Where Now?', NIAS Press; 2014, p. 382. International Crisis Group, 'Myanmar: the politics of economic reform', Asia Report N°231; July 2012, <http://www.crisisgroup.org/-/media/files/asia/south-east-asia/burma-myanmar/231-myanmar-the-politics-of-economic-reform.pdf>, last accessed 28 August 2015.
  169. Sean Turnell, 'Burma's Economy and the Struggle for Reform' in Mikael Gravers and Flemming Ytzen (eds) 'Burma / Myanmar – Where Now?', NIAS Press; 2014, p. 382. International Crisis Group, 'Myanmar: the politics of economic reform', Asia Report N°231; July 2012, <http://www.crisisgroup.org/-/media/files/asia/south-east-asia/burma-myanmar/231-myanmar-the-politics-of-economic-reform.pdf>, last accessed 28 August 2015.
  170. Global Witness interviews with political analyst and former official; 2014 and 2015. (Global Witness interviews 268 and 256-B). International Crisis Group, 'Myanmar: the politics of economic reform', Asia Report N°231; July 2012, <http://www.crisisgroup.org/-/media/files/asia/south-east-asia/burma-myanmar/231-myanmar-the-politics-of-economic-reform.pdf>, last accessed 28 August 2015. Sean Turnell, 'Burma's Economy and the Struggle for Reform' in Mikael Gravers and Flemming Ytzen (eds) 'Burma / Myanmar – Where Now?', NIAS Press; 2014, p. 382.
  171. Global Witness interview with former official; 2014. (Global Witness interview 256-B).
  172. Amnesty International, 'Open for Business? Corporate Crime and Abuses at Myanmar Copper Mine'; February 2015, <https://www.amnesty.org/en/documents/asa16/0003/2015/en>, last accessed 28 August 2015. Lawyers' Network and Justice Trust, 'Submission of Evidence to Myanmar Government's Letpadaung Investigation Commission'; 1 December 2012, <http://www.humanrights.asia/news/press-releases/pdf/2013/AHRC-PRL-007-2013.pdf>, last accessed 28 August 2015. BBC, 'Burma confirms phosphorus used at mine protest'; 12 March, 2013, <http://www.bbc.co.uk/news/world-asia-21751357>, last accessed 28 August 2015.
  173. Global Witness meeting with MEHL; 2015. Global Witness interviews with three jade businessmen and a jade industry consultant; 2014 and 2015. (Global Witness interviews 14-G-H, 218, 310 and 236). Mary P Callahan, 'Making Enemies', Cornell Press; 2003, p. 214 describes MEHL in general terms as controlling the gems industry at this time.
  174. Global Witness interview with jade businessman; 2014. (Global Witness interview 14-D).
  175. Global Witness interviews with a lawyer, an MEHL employee and a jade businessman; 2014 and 2015. (Global Witness interviews 360, 484 and 218-B).
  176. MEHL, 'Twelfth Annual Report of the Year 2001-2002'; 3 June 2002, reproduced in Sein Htay / Federation of Trade Unions-Burma, 'Economic Report on Burma 2004/05', Annex 3; 2005, [http://www.burmalibrary.org/docs12/FTUB-Economic-Report-Sein\\_Htay2004-05-red.pdf](http://www.burmalibrary.org/docs12/FTUB-Economic-Report-Sein_Htay2004-05-red.pdf), last accessed 28 September 2015. Global Witness asked an expert on the activities of MEHL to review this document and they believe it to be authentic. Global Witness interview with jade businessman; 2014. (Global Witness interview 14-H).
  177. New Light of Myanmar, 'Lt-Gen Tin Aye visits UMEHL jade, gem sales'; 27 January 2005. New Light of Myanmar, 'UMEHL Gem and Jade Sales'; 15 May 2002. New Light of Myanmar, '13th Gems and Jade Sales of UMEHL continues'; 14 July 2000.

178. New Light of Myanmar, 'Ministry of Mines Holds Coordination Meeting'; 30 June 2001. New Light of Myanmar, 'Commentary on Myanmar Jade Business'; 9 October 2001. New Light of Myanmar, 'Significant Mid-Year Myanmar Gems Emporium'; 3 November 2002. Global Witness interview with jade businessman; 2015. [Global Witness interview 218-B].
179. Global Witness interviews with a humanitarian worker and two jade businessmen; 2014 and 2015. [Global Witness interviews 202, 135-C and 6-C].
180. Global Witness interview with a former official; 2014. [Global Witness interview 256-B].
181. Andrew RC Marshall and Min Zayar Oo / Reuters, 'Myanmar's old guard runs a jade empire'; 29 September 2013, <http://graphics.thomsonreuters.com/13/09/MYANMAR-JADE.pdf>, last accessed 4 October 2015.
182. Global Witness meeting with MEHL; 2015.
183. Global Witness meeting with MEHL; 2015.
184. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of mid-2014) and a MGE map of the same name in use in late 2012. These maps designate MEHL zones as follows: San Hkar – 125 acres; Hmaw Wam area – 87 acres and Taw Maw – unspecified acreage. Assuming the Taw Maw mine is drawn roughly to scale, it would appear to cover around 80-100 acres.
185. Global Witness interview with jade businessman; 2015. [Global Witness interview 6-C].
186. Global Witness interviews with three jade businessmen; 2014 and 2015. [Global Witness interviews 135-C, 6-C and 14-B].
187. Global Witness meeting with MEHL; 2015. Letter from MEHL; 2015.
188. Global Witness meeting with MEHL; 2015.
189. Global Witness interviews with five jade businessmen; 2014 and 2015. [Global Witness interviews 14-A, 135-C, 384-A, 472 and 473].
190. Global Witness meeting with MEHL; 2015. Letter from MEHL; 2015.
191. Global Witness interviews with three jade businessman and an employee of MEHL; 2014 and 2015. [Global Witness interviews 6-C, 14-A, 58 and 484].
192. Letter from MEHL; 2015.
193. Global Witness interview with jade businessman; 2015. [Global Witness interview 6-C].
194. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of late 2012).
195. Letter from MEHL; 2015.
196. Global Witness meeting with MEHL; 2015.
197. Global Witness interview with jade businessman; 2014. [Global Witness interview 14-G].
198. Global Witness interview with jade businessman; 2014. [Global Witness interview 14-G].
199. Global Witness interview with jade businessman; 2014. [Global Witness interview 14-G].
200. Global Witness interview with two jade businessmen; 2015. [Global Witness interview 135-C and 65-F].
201. Global Witness interview with jade businessman; 2014. [Global Witness interview 67-B].
202. Global Witness interview with jade businessman; 2014. [Global Witness interview 14-G].
203. Letter from MEHL; 2015.
204. Myanmar Gems Emporium official sales figures 2014. MGJEA list of top 70 jade vendors at Myanmar's Golden Jubilee (50th) Emporium; 2013. MGJEA, 'List of Joint Venture companies, cooperatives & private companies'; 13 July 2013. Communication from jade business expert; May 2014. MGJEA, 'Presentation on the Facts and Figures of the 50th Myanmar Gems Emporium'; 2013.
205. Global Witness meeting with MEHL; 2015. Letter from MEHL; 2015.
206. Quote from Mary P Callahan, 'Making Enemies', Cornell Press; 2003, p.214. Global Witness interview with KIA/KIO representatives; 2015. [Global Witness interview 395].
207. Tan Yawen Yang Zhe / Chinanews, 'President Thein Sein visited Lingguangsi in Beijing'; 18 June 2014, <http://www.chinanews.com/gj/2014/06-28/6329769.shtml>, last accessed 11 August 2015. Jade-Juecui [a Wechat account / public blog] 'Myanmar's President praised the jade carving in the temple of Beijing'; 29 June 2014, <http://wx.paigu.com/a/695620/32074824.html>, last accessed 11 August 2015. This Jade-Juecui article states that President Thein Sein considers the Buddha to represent the friendship between Chinese and Burmese, because it is carved in China, and the jade is from Myanmar. It also refers to Zhang Yingchun (the Chinese name of Ever Winner boss Aike Htwe) as the provider of the jade and includes his picture.
208. Myanmar Gems Emporium official sales figures 2013 and 2014.
209. Global Witness interviews with family member of jade businessman and a jade businessman; 2015. [Global Witness interviews 379 and 380]. Letter to Global Witness from Ei Ei Htwe; 2015. Record for Yadanar Pyi Phyoo Aung Gems Co. Ltd from DICA online database <http://dica.gov.mm.x-aas.net>, retrieved 30 September 2015.
210. Global Witness interviews with a community leader and two jade businessmen; 2014 and 2015. [Global Witness interviews 242, 218-B and 309].
211. DICA record for Ever Winner Gems Co. Ltd, Ever Winner Trading Co. Ltd, Lin Lett Win Yadanar Gems Co. Ltd, Pho Thar Htoo Gems Co. Ltd, Kaung Myat Thukha Co. Ltd, Than Lwin Aye Yar Gems Co. Ltd, Yadanar Sin Thiri Trading Co. Ltd, Khine Myanmar Gems, ARS International Ltd, extracted by Open Corporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Records for same companies from DICA online database <http://dica.gov.mm.x-aas.net>, retrieved 19 August 2015. Communication from Ministry of Mines regarding licence allocations; 2015.
212. Communication from KBZ; 2015. Sihui Shipin / Sihui Jade Article Credit Information, Event 21 December 2012, <http://yqx.sihui.gov.cn/Item/2402.aspx>, last accessed 11 August 2015.

213. Gems and Jewellery Trade Association of China, 'Leader of Gems, Jewellery Trade Association of China', <http://www.jewellery.org.cn/wz.aspx?CID=0&ClassID=285&Maticsoft=1&Ms=285>, last accessed 11 August 2015. Embassy in Myanmar / Ministry of Foreign Affairs of the People's Republic of China, 'Chinese Ambassador to Myanmar Accepts Donation for Earthquake Disaster Area in Yunnan from Yunnan Chamber of Commerce'; 21 August 2014, [http://www.fmprc.gov.cn/mfa\\_chn/zwbdt\\_602255/jghd\\_602270/t1184446.shtml](http://www.fmprc.gov.cn/mfa_chn/zwbdt_602255/jghd_602270/t1184446.shtml), last accessed 11 August 2015. Houlan Yang / Ministry of Foreign Affairs of the People's Republic of China, 'Chinese Ambassador to Myanmar Houlan Yang made a speech in supervisory committee's inauguration ceremony'; 25 January 2014, [http://www.fmprc.gov.cn/mfa\\_chn/dszlsjt\\_602260/t1122980.shtml](http://www.fmprc.gov.cn/mfa_chn/dszlsjt_602260/t1122980.shtml), last accessed 11 August 2015. Myanmar Golden Phoenix, 'People in Yunnan Chamber of Commerce to celebrate Chinese New Year'; 3 March 2014, <http://www.mmgsmedia.com/business/5634-2013-12-11-09-10-07>, last accessed 11 August 2015.
214. Communication from jade industry experts; 2014. Global Witness interviews with a community leader, a politician, a jade businessman and a contractor to jade companies; 2014 and 2015. (Global Witness interviews 242-B, 243-B, 218-B and 348).
215. DICA records for ARS International Co. Ltd, Ever Winner Gems Co. Ltd, Kaung Myat Thukha Co. Ltd, Khine Myanmar Gems Co. Ltd, Lin Lett Win Yadanar Gems Co. Ltd, Pho Thar Htoo Gems Co. Ltd, Than Lwin Aye Yar Gems Co. Ltd, Yadanar Pyi Phyo Aung Gems & Jewellery Co. Ltd, Yadanar Shwe Yi Win Gems Co. Ltd, Yadanar Sin Thiri Trading Co. Ltd, extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. DICA, 'Company Information Report'; June 2013. MGE, 'Lone Khin Treasure Land and related blocks' map (in use as of mid-2014); MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of mid-2014). MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012). MGE, 'Map Showing Hpakant Treasure Land and related blocks' (in use as of mid-2014). MGE, 'Hpakant Treasure Land and related blocks' map (in use as of end of 2012). MGE, 'Map Showing Hpakant Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012). Communication from Ministry of Mines; 2015. Communication from Burma Free Rangers; 2015. Communication from jade industry expert group 2014. Global Witness interviews with a community leader, a contractor to jade companies, local residents, a consultant to jade companies, a KIA officer and two jade businessmen; 2014 and 2015. (Global Witness interviews 14-G, 218-B, 242, 236-A, 348, 345 and 346). Letter from Ei Ei Htwe; 2015.
216. Letter from Ei Ei Htwe to Global Witness; 2015.
217. Global Witness interview with jade businessman; 2015. (Global Witness interview 65-G). Eleven Media, 'Villages, including in Hpakant Township, are worrying about floods in the monsoon seasons because the waste soil from nearby jade projects run by seven companies is being thrown into Ever Lake'; 2 May 2015.
218. Global Witness interviews with businessman and two jade businessmen; 2015. (Global Witness interviews 416, 248 and 250).
219. DICA record for Yadanar Sin Thiri Trading Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Communication from Ministry of Mines; 2015. Yadanar Sin Thiri Gems, [http://ystrgms.com/index.php?option=com\\_contact&view=category&catid=8&Itemid=13](http://ystrgms.com/index.php?option=com_contact&view=category&catid=8&Itemid=13), last accessed 15 August 2015. Global Witness interviews with jade trader and an official; 2015. (Global Witness interviews 65-E and 485). Aung Hla Htun and Jared Ferrie / Reuters, 'Two dead, 30 missing after rockslide at Myanmar jade mine'; 7 January 2015, <http://uk.reuters.com/article/2015/01/07/uk-myanmar-mine-idUKKBN0KG1GL20150107>, last accessed 15 August 2015. Nyein Nyein / The Irrawaddy, 'Death Toll Climbs to 4, Search Ongoing After Hpakant Rockslide'; 8 January 2015, <http://www.irrawaddy.org/burma/death-toll-climbs-4-search-ongoing-hpakant-rockslide.html>, last accessed 15 August 2015.
220. Global Witness interview with local residents; 2015. (Global Witness interviews 345 and 346).
221. Global Witness interview with international economist; 2015. (Global Witness interview 217).
222. KBZ, 'KBZ Cards', [https://www.facebook.com/KBZCards/info?tab=page\\_info](https://www.facebook.com/KBZCards/info?tab=page_info), last accessed 28 September 2015. Meeting with KBZ; 2015.
223. Myanmar Ministry of Finance, 'Top 1000 Myanmar Income Tax paying companies for the year 2013-2014'.
224. Myanmar Centre for Responsible Business, 'Pwint Thit Sa - Transparency in Myanmar Enterprises / First Report'; July 2014, p.18, <http://www.myanmar-responsiblebusiness.org/pdf/2014-07-22-Pwint-Thit-Sa-First-Report.pdf>, last accessed 19 August 2015. Myanmar Centre for Responsible Business, 'Pwint Thit Sa - Transparency in Myanmar Enterprises / Second Report'; July 2015, p.13, <http://www.myanmar-responsiblebusiness.org/news/second-pwint-thit-sa-time-report.html>, last accessed 19 August 2015.
225. KBZ Group of Companies, 'Code of Conduct', 24 June 2014, [http://www.kbzgroup.com.mm/sites/default/files/kbz\\_coc\\_eng.pdf](http://www.kbzgroup.com.mm/sites/default/files/kbz_coc_eng.pdf), last accessed 19 August 2015.
226. KBZ Group, 'Corporate Structure', [http://www.kbzgroup.com.mm/corporate\\_structure](http://www.kbzgroup.com.mm/corporate_structure), last accessed 19 August 2015.
227. KBZ letter to Global Witness; 2015. Global Witness meeting with KBZ; 2015. Communication from KBZ; 2015.
228. KBZ letter to Global Witness; 2015. Global Witness meeting with KBZ; 2015. Global Witness interviews with two jade businessmen; 2015. (Global Witness interviews 54 and 486).
229. Communication from KBZ; 2015.
230. US Embassy Rangoon, 'Sanctioning Private Burmese Companies under the JADE Act'; 19 November 2008, <https://wikileaks.org/cable/2008/11/08RANGOON896.html>, last accessed 1 October 2015.
231. KBZ Group, 'A closer look at KBZ Group of Companies'; 2011.
232. KBZ Group, 'A closer look at KBZ Group of Companies'; 2011.
233. Global Witness interview with industry consultant; 2014. (Global Witness interview 236).
234. Global Witness interviews with industry consultant and jade businessman; 2014 and 2015. (Global Witness interviews 218-B and 236).
235. KBZ Group of Companies, 'Code of Conduct', 24 June 2014, [http://www.kbzgroup.com.mm/sites/default/files/kbz\\_coc\\_eng.pdf](http://www.kbzgroup.com.mm/sites/default/files/kbz_coc_eng.pdf), last accessed 19 August 2015.
236. Global Witness interview with jade businessman; 2015. (Global Witness interview 218-B).
237. Global Witness meeting with KBZ; 2015.
238. Global Witness interview with businessman; 2015. (Global Witness interview 379).
239. KBZ letter to Global Witness; 2015. DICA record for IKBZ Co. Ltd, extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Record for IKBZ from DICA online database <http://dica.gov.mm.x-aas.net>, retrieved 19 August 2015.
240. DICA record for IKBZ Co. Ltd, extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Record for IKBZ from DICA online database <http://dica.gov.mm.x-aas.net>, retrieved 19 August 2015.

241. KBZ letter to Global Witness; 2015.
242. Letter to Global Witness from Ei Ei Htwe; 2015.
243. KBZ letter to Global Witness; 2015.
244. KBZ letter to Global Witness; 2015.
245. MGE, '51st Myanmar Gems Emporium Sold Lot List'; 2014. The sum given here in US dollars (and in all figures for June 2014) is based on the conversion rate of 1.3596 US dollars to the euro which was the average daily exchange rate across the days that the 2014 Myanmar Gems Emporium took place, <http://www.oanda.com/currency/converter/>. Meeting with MEHL and Myanmar Imperial Jade; 2015.
246. Letter to Global Witness from MEHL; 2015.
247. Communication from KBZ; 2015.
248. Bertil Lintner, 'Blood Brothers – Crime, Business and Politics in Asia', Silkworm Books, 2003, pages 262-263, 268. US Embassy Rangoon, 'Dropping the Hammer on Crony Steven Law, 28 December 2007, [https://www.wikileaks.org/plusd/cables/07RANGOON1211\\_a.html](https://www.wikileaks.org/plusd/cables/07RANGOON1211_a.html), last accessed 28 September 2015. The Economist, 'Obituary – Lo Hsing Han, heroin king and business tycoon, died on July 6th, aged about 80'; 27 July 2013, <http://www.economist.com/news/obituary/21582234-lo-hsing-han-heroin-king-and-business-tycoon-died-july-6th-aged-about-80-lo-hsing-han>, last accessed 4 September 2015. For background Lo Hsing-Han's career as a drugs trafficker and warlord, see Bertil Lintner – Opium and Insurgency Since 1948', Silkworm Books; 1999, pages 230-231, 264-265, 270, 365-366; Alfred W McCoy, 'The Politics of Heroin – CIA Complicity in the Global Drug Trade' (Revised Edition), Lawrence Hill Books; 2003, pages 423-427, 434, 438; Martin Smith, 'Burma-Insurgency and the Politics of Ethnicity', Zed Books Ltd; 1999, pages 95-96, 315, 380, 427-428. US Department of The Treasury, 'SDN List by Country', <http://www.treasury.gov/ofac/downloads/ctrlst.txt>, last accessed 4 September 2015.
249. Global Witness interviews with businessman and a MGE official; 2015. (Global Witness interviews 168 and 215). US Embassy Rangoon, 'Dropping the Hammer on Crony Steven Law, 28 December 2007, [https://www.wikileaks.org/plusd/cables/07RANGOON1211\\_a.html](https://www.wikileaks.org/plusd/cables/07RANGOON1211_a.html), last accessed 1 October 2015. The Irrawaddy, 'Tracking the Tycoons'; September 2008 Volume 16 No.9, [http://www2.irrawaddy.org/article.php?art\\_id=14151&page=2](http://www2.irrawaddy.org/article.php?art_id=14151&page=2), last accessed 4 September 2015.
250. Flemming Ytzen, 'The Myitsonse Entanglement' in Mikael Gravers and Flemming Ytzen (eds) 'Burma / Myanmar – Where Now?', NIAS Press; 2014, p.358. Victoria Heather / DVB 'VP pushed out over corruption, resistance to reforms'; 24 May 2012, <http://www.kdng.org/news/34-news/248--vp-pushed-out-over-corruption-resistance-to-reforms.html>, last accessed 28 September 2015.
251. Myanmar Gems Emporium official sales figures 2013 and 2014.
252. DICA record for Yadanar Taung Tann Gems Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. DICA, 'Company Information Report'; June 2013. For Steven Law's aliases, see, for example: US Embassy Rangoon, 'Dropping the Hammer on Crony Steven Law', 28 December 2007, [https://www.wikileaks.org/plusd/cables/07RANGOON1211\\_a.html](https://www.wikileaks.org/plusd/cables/07RANGOON1211_a.html), last accessed 28 September 2015.
253. DICA record for Yadanar Taung Tann Gems Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net> 4 September 2015.
254. Lin Thant and Seamus Martov / The Irrawaddy, 'Canada Says Burma Invited Controversial Tycoon on Trade Tour'; 30 June 2014, <http://www.irrawaddy.org/burma/canada-says-burma-invited-controversial-tycoon-trade-tour.html>, last accessed 4 September 2015. Lin Thant and Seamus Martov / The Irrawaddy, 'Canada Welcomes Tycoon Tied to Drugs, but Denies Visa to Kachin Activist'; 24 June 2014, <http://www.irrawaddy.org/burma/canada-welcomes-tycoon-tied-drugs-denies-visa-kachin-activist.html>, last accessed 4 September 2015.
255. Lin Thant and Seamus Martov / The Irrawaddy, 'Canada Says Burma Invited Controversial Tycoon on Trade Tour'; 30 June 2014, <http://www.irrawaddy.org/burma/canada-says-burma-invited-controversial-tycoon-trade-tour.html>, accessed 4 September 2015. Communication from Seamus Martov; 2015.
256. MGE, 'Hpakant Treasure Land and related blocks' map (in use as of end of 2012). MGE, 'Map Showing Hpakant Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012). The Yadanar Taung Tann name also appears to be marked on the same Met Lin Chaung (#2) mine in the MGE, 'Map Showing Hpakant Treasure Land Joint Venture Jade Mining Blocks' that was in use as of end mid-2014, however the text is indistinct.
257. Global Witness interview with consultant to jade business and a businessman; 2014 and 2015. (Global Witness interview 236 and 168).
258. MGE, 'Gwi Hkar Treasure Land and related blocks' map (in use as of mid-2015).
259. DICA record for Yadanar Taung Tann Gems Co. Ltd and Dagon Yadanar Gems Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net> 4 September 2015. As of October 2014, the same two directors were also the company's sole shareholders: DICA records for Dagon Yadanar Gems Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. MGE, 'Gwi Hkar Treasure Land and related blocks' map (in use as of mid-2015).
260. Global Witness interview with businessman; 2015. (Global Witness interview 168).
261. Global Witness interview with businessman; 2015. (Global Witness interview 168).
262. According to 2014 emporium sales records, the Htoo Group's Htoo International and Htoo Apyi Pyi Saing Yar (a joint venture with MG) made sales of US\$13,223,634. Htoo Group has also provided Global Witness with a breakdown of its 2014 jade sales. However, there is a discrepancy of 16 lots which are recorded in the official emporium sales records but not in the data provided to Global Witness by Htoo Group. This discrepancy may be due to buyers failing to complete sales agreed at the emporium. Global Witness has sought clarification from Htoo Group but has not received a response.
263. US Embassy Rangoon, 'The Burmese Regime's Number One Crony: Tay Za', Wikileaks; 3 April 2007, [https://www.wikileaks.org/plusd/cables/07RANGOON328\\_a.html](https://www.wikileaks.org/plusd/cables/07RANGOON328_a.html), last accessed 24 April 2015. US Embassy Rangoon, 'Tay Za's Family Tell Their Side of the Story', Wikileaks; 7 November 2007, [https://www.wikileaks.org/plusd/cables/07RANGOON1093\\_a.html](https://www.wikileaks.org/plusd/cables/07RANGOON1093_a.html), last accessed 24 April 2015.
264. US Department of the Treasury, 'Treasury Action Targets Financial Network of Burmese Tycoon and Regime Henchman Tay Za'; 5 February 2008, <http://www.treasury.gov/press-center/press-releases/Pages/hp807.aspx>, last accessed 24 April 2015.
265. US Department of the Treasury, 'Treasury Action Targets Financial Network of Burmese Tycoon and Regime Henchman Tay Za'; 5 February 2008, <http://www.treasury.gov/press-center/press-releases/Pages/hp807.aspx>, last accessed 24 April 2015. Rieffel, L., 'Myanmar/Burma: Inside Challenges, Outside Interests', Brookings Institution Press; 4 October 2010, p.41. BBC, 'Burma's parliament opens new session'; 31 January 2011, <http://www.bbc.co.uk/news/world-asia-pacific-12321085>, last accessed 3 May 2015. Min Zin, 'In Myanmar, a Soft Coup Ahead of an Election', The New York Times; 11 September 2015, [http://www.nytimes.com/2015/09/12/opinion/in-myanmar-a-soft-coup-ahead-of-an-election.html?\\_r=0](http://www.nytimes.com/2015/09/12/opinion/in-myanmar-a-soft-coup-ahead-of-an-election.html?_r=0), last accessed 30 September 2015.

266. Wikileaks, 'Tay Za's Family Tell Their Side of the Story'; 7 November 2007, [https://www.wikileaks.org/plusd/cables/07RANGOON1093\\_a.html](https://www.wikileaks.org/plusd/cables/07RANGOON1093_a.html), last accessed 24 April 2015.
267. Global Witness interviews with jade businessman and corporate researcher focused on Myanmar; 2014 and 2015. (Global Witness interviews 109 and 218-B).
268. Global Witness meeting with Htoo Group representatives, March 2015.
269. Global Witness interview with three jade businessman and an employee of MEHL; 2014 and 2015. (Global Witness interviews 6-C, 14-A, 58 and 484).
270. Global Witness field interviews in Hpakant, including interviews with members of community affected by relocation; 2014. (Global Witness interviews 135-B and 482).
271. Htoo International Industry Company & Htoo Gems and Jewellery Company, 'Presentation on Jade Mining Operations', 13 March 2015. Letter from Kyauk Seinn Nagar (Gems) Co., Ltd to Global Witness dated 25 July 2015.
272. Global Witness, 'A Conflict of Interests – The Uncertain Future of Burma's Forests'; 2003, page 93, <https://www.globalwitness.org/sites/default/files/import/03sep3%20Conflict%20of%20Interests90-127.pdf>, last accessed 21 May 2015.
273. Communication from Tom Kramer; 2015. Global Witness interview with international expert on Myanmar's narcotics industry; 2015. (Global Witness interview 296-A).
274. Global Witness interviews with a businessman, a humanitarian worker, Kachin politicians and five jade businessmen; 2014 and 2015. (Global Witness interviews 187, 202-C, 8, 9, 263, 218-B, 205-B, 377-B and 135-C). The UWSA/UWSP is the largest and most well-equipped non-state armed group in Myanmar, with an estimated 20,000-30,000 regular troops and up to 50,000 reserves. Bertil Lintner / The Irrawaddy, 'Who are the Wa?'; 2 June 2014, <http://www.irrawaddy.org/magazine/wa.html>, last accessed 15 September 2015. Tom Kramer, Transnational Institute, 'Neither War nor Peace: The Future of the Ceasefire Agreements in Burma'; July 2009, p.16, <http://www.tni.org/files/download/ceasefire.pdf>, last accessed 16 April 2015. Burma News International, 'Deciphering Myanmar's Peace Process: A Reference Guide, 2014'; March 2014, [http://mmpeacemonitor.org/images/pdf/deciphering\\_myanmar\\_peace\\_process\\_2014.pdf](http://mmpeacemonitor.org/images/pdf/deciphering_myanmar_peace_process_2014.pdf), last accessed 1 March 2015. Ashley South, 'Ethnic Politics in Burma: States of Conflict', Routledge Contemporary Series; 2008, Chapter 5.
275. Global Witness interview with jade businessman; 2015. (Global Witness interview 135).
276. Global Witness interviews with two jade businessmen; 2014 and 2015. (Global Witness interview 310 and 377-B). Bertil Lintner & Michael Black, 'Merchants of Madness: The Methamphetamine Explosion in the Golden Triangle', Silkworm Books; 2009, p.118.
277. Letter to Global Witness from Li Myint and Kyaw Kyaw Oo; 2015. DICA record for Hong Pang Mining Co. Ltd, Hong Pang Construction Co. Ltd, Hong Pang Textile Co. Ltd, Hong Pang Electronic Industry Co. Ltd, Hong Pang Livestock Co. Ltd and Hong Pang General Trading Co. Ltd, extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. For references to US Sanctions see US Treasury, 'Recent OFAC Actions'; 13 November 2008, <http://www.treasury.gov/resource-center/sanctions/OFAC-Enforcement/Pages/20081113.aspx>, last accessed 7 May 2015.
278. Detail of the evidence supporting these findings is set out in the accompanying background paper on UWSA/UWSP companies.
279. Global Witness interviews with a KIA/KIO representative, two international experts on Myanmar's narcotics industry, two former jade businessmen and four jade businessmen; 2014 and 2015. (Global Witness interviews 259, 260, 296, 310, 382, 383, 481, 377-B and 14-H). Letter to Global Witness from Li Myint and Kyaw Kyaw Oo; 2015. Communication from international expert on Myanmar's narcotics industry; 2015. DICA records for three Apho Tan San Chain Hmi / Value Standard companies: Value Standard Dairg Products Co. Ltd; Value Standard General Trading Co. Ltd and Value Standard Food Industrial Co. Ltd; also Myanmar Takaung Gems Co. Ltd, Hong Pang Mining Co. Ltd, Hong Pang Construction Co. Ltd, Hong Pang Textile Co. Ltd, Hong Pang Electronic Industry Co. Ltd, Hong Pang Livestock Co. Ltd, Hong Pang General Trading Co. Ltd, Thaw Tar Win Gems & Jewellery Co. Ltd, Thaw Tar Win Trading Co. Ltd, Thaw Tar Win Construction Co. Ltd, Moe Let Aung Construction Co. Ltd and Shwe Pyae Sone Tun Transportation Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. DICA records for three Apho Tan San Chain Hmi / Value Standard companies: Value Standard Dairg Products Co. Ltd; Value Standard General Trading Co. Ltd and Value Standard Food Industrial Co. Ltd; also Myanmar Takaung Gems Co. Ltd, Ayeyar Yadanar Gems & Jewellery Co. Ltd, Thaw Tar Win Gems & Jewellery Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 5-7 August 2015. MGE, 'Mining Blocks Owned by Myanmar Takaung Company'. Communication from MGE; 2015. Bertil Lintner & Michael Black, 'Merchants of Madness: The Methamphetamine Explosion in the Golden Triangle', Silkworm Books; 2009, p.99.
280. MGE, 'Mining Blocks Owned by Myanmar Takaung Company'. Global Witness interviews with a jade industry expert group, a jade businessmen, two Myanmar Takaung employees; 2014 and 2015. (Global Witness interviews 6-C, 43, 242 and 347). Letter to Global Witness from Li Myint and Kyaw Kyaw Oo; 2015.
281. Global Witness interviews with two international experts on Myanmar's narcotics industry, three jade businessmen and an ethnic armed group leader; 2014 and 2015. (Global Witness interviews 296-B, 296-C, 303, 218-C, 310, 377, 473).
282. Global Witness interviews with six jade businessmen and a KIA/KIO representative; 2014 and 2015. (Global Witness interviews 6, 218-B, 135, 377-B, 487, 434 and 259).
283. Global Witness interviews with six jade businessmen; 2014 and 2015. (Global Witness interviews 65, 14-D, 117, 187, 177-B and 6-C). Communication from international expert on Myanmar's Narcotics Industry; 2015. DICA records for Myanmar Takaung Gems Co. Ltd, Hong Pang Mining Co. Ltd, Hong Pang Construction Co. Ltd, Hong Pang Textile Co. Ltd, Hong Pang Electronic Industry Co. Ltd, Hong Pang Livestock Co. Ltd and Hong Pang General Trading Co. Ltd, extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. DICA records for Myanmar Takaung Gems Co. Ltd, retrieved from <http://dica.gov.mm.x-aas.net>; 5 August 2015. MGE, 'Mining Blocks Owned by Myanmar Takaung Company' states that Zaw Bo Khant is a representative of Thaw Tar Win Gems and Apho Tan San Chain Hmi Gems. A written communication from MGE lists Zaw Bo Khant as responsible for Thaw Tar Win Gems' mining blocks in Hpakant. Letter to Global Witness from Li Myint and Kyaw Kyaw Oo; 2015.
284. Communication from international expert on Myanmar's Narcotics Industry; 2015. Global Witness meeting with Zaw Bo Khant; 2015. Bertil Lintner & Michael Black, 'Merchants of Madness: The Methamphetamine Explosion in the Golden Triangle', Silkworm Books; 2009, p.99. Letter to Global Witness from Li Myint and Kyaw Kyaw Oo; 2015. DICA record for Hong Pang Mining Co. Ltd, Hong Pang Construction Co. Ltd, Hong Pang Textile Co. Ltd, Hong Pang Electronic Industry Co. Ltd, Hong Pang Livestock Co. Ltd and Hong Pang General Trading Co. Ltd, extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015.
285. US Treasury, 'Recent OFAC Actions'; 13 November 2008, <http://www.treasury.gov/resource-center/sanctions/OFAC-Enforcement/Pages/20081113.aspx>, last accessed 15 September 2015.
286. This comment was made by a Myanmar Takaung representative to a jade businessman whom Global Witness later interviewed; 2015. (Global Witness interview 250).
287. MGE, 'Mining Blocks Owned by Myanmar Takaung Company'.

288. Global Witness interview with a political analyst, KIA/KIO officials, a jade mine worker, two jade businessman and a civil society organisation; 2014 and 2015. (Global Witness interviews 18, 24, 177-B, 197-D, 218-B and 295).
289. Global Witness interviews with a businessman, a jade company staff member and two jade businessmen; 2015. (Global Witness interviews 24, 416, 248 and 250).
290. Global Witness interview with jade businessman; 2015. (Global Witness interview 65-J).
291. Global Witness interviews with local official and a jade businessman; 2015. (Global Witness interviews 52 and 65-E). Eleven Media, 'Many buried in jade mine landslide'; 8 March 2015. <http://www.elevenmyanmar.com/local/many-buried-jade-mine-landslide>, last accessed 11 May 2015. Reuters, 'Rockslide at Burma Jade Mine Kills 9, Around 20 Missing'; 1 October 2015, <http://www.irrawaddy.org/burma/rockslide-at-burma-jade-mine-kills-9-around-20-missing.html>, last accessed 1 October 2015. Reuters, 'Rockslide at Burma Jade Mine Kills 9, Around 20 Missing'; 1 April 2015, <http://www.irrawaddy.org/burma/rockslide-at-burma-jade-mine-kills-9-around-20-missing.html>, last accessed 1 October 2015.
292. Global Witness interview with jade businessman; 2015.
293. Global Witness interview with jade businessman; 2015.
294. Global Witness interviews with three jade businessmen; 2015. (Global Witness interviews 218-C, 6-C, and 135-C).
295. Global Witness interview with a jade businessman; 2014 and 2015. (Global Witness interview 218-B).
296. Global Witness interview with jade businessman; 2015.
297. Global Witness interview with jade businessman; 2015.
298. Global Witness interview with jade businessman; 2014. (Global Witness interview 397-A).
299. Martin Smith, 'Burma in Insurgency and the Politics of Ethnicity', Zed Books Ltd; 1999, p.339. Tom Kramer, 'Neither War Nor Peace: The Future of the Cease-fire Agreements in Burma', Transnational Institute, pp.14 and 27; July 2009, <https://www.tni.org/files/download/ceasefire.pdf>, last accessed 1 October 2015. According to a letter from Ruby Dragon Group to Global Witness, the group began business in 1992 in the wake of the 1991 ceasefire negotiated with the Pa-O National Organisation, and following a peace agreement. According to the 2013 version of the Ruby Dragon Group's website, by 2002, it had been awarded 71 gemstone blocks in Shan State and 66 gemstone blocks in Kachin State. The 2013 version of the website, [www.rubydragongroupcompanies.com](http://www.rubydragongroupcompanies.com) (which is referenced on Ruby Dragon Group business cards) is accessible via website archive, the Way Back Machine, at <http://web.archive.org/web/20130725033738/http://www.rubydragongroupcompanies.com/>; last accessed 14 April 2015. See also The New Light of Myanmar, 'Secretary-1 addresses ceremony to donate over 3,000 tons Massive Jade Dyke to the State'; 26 May 2002.
300. Letter from Ruby Dragon Group to Global Witness confirming that it began mining operations in Hpakant in May 1997, and has operated in partnership with the Ministry of Mines since 2000 [translated from Myanmar language into English by Global Witness]. Global Witness interview with jade businessman; 2015. (Global Witness interview 218-B). The New Light of Myanmar, 'Secretary-1 addresses ceremony to donate over 3,000 tons Massive Jade Dyke to the State'; 26 May 2002.
301. During the 2012-2013 and 2013-2014 tax years, Ruby Dragon Group's gemstone and cement companies have both featured in Myanmar's top 500 tax payer lists with Dragon Cement paying over 200 million kyat in commercial tax in 2013-2014. See Myanmar Ministry of Finance, 'List of Top (500) Commercial Tax Payers for 2012-2013'. Myanmar Ministry of Finance, 'Top 1000 Myanmar Business Owners paying Income Tax for the year of 2013-2014'. Myanmar Ministry of Finance, 'Top 1000 Myanmar Business Owners/Companies Paying 2013-14 Commercial Tax'. According to Ruby Dragon Group business cards provided to Global Witness in April 2014, the Ruby Dragon Group has interests in sectors including gemstones, gold and antimony mining, cement manufacturing, hotels, agriculture, food and wine.
302. MGE official sales figures for 2013 and 2014.
303. Letter from Ruby Dragon Group to Global Witness; 2015.
304. The New Light of Myanmar, 'Secretary-1 addresses ceremony to donate over 3,000 tons Massive Jade Dyke to the State'; 26 May 2002. The New Light of Myanmar, 'The Union of Myanmar, Union Election Commission, Nay Pyi Taw, Notification No. 119/2010'; 8 November 2010. Letter from Ruby Dragon Group to Global Witness; 2015.
305. In the 2010 elections, San Lwin ran unopposed on behalf of the PNO for the Hopong Township (2) constituency, in the capital of the Pa-O Self-Administered Zone. He was then elected as Chairman of the Zone. The New Light of Myanmar, 'The Union of Myanmar, Union Election Commission, Nay Pyi Taw, Notification No. 120/2010'; 8 November 2010. The New Light of Myanmar, 'Regular sessions of first Region and State Hluttaws go on. Approval sought for nomination of Advocate-General, Auditor-General of Regions or States. Nominations of executive committee members of Leading Bodies of Self-Administered Division and Self-Administered Zone approved'; 8 February 2011. Lwin, S, Myanmar Times, 'New self-administered areas struggle to assert authority'; 17 February 2011, <http://www.mmtimes.com/index.php/national-news/9589-new-self-administered-areas-struggle-to-assert-authority.html>, last accessed 1 October 2015. In 2014, San Lwin and Nay Win Tun were both listed as directors of Kokar Joker Mate Thahar Tours Co., Ltd, and each had directorships of companies in the Golden Island Cottages Group. 2014 company records taken from DICA, as extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015. Khun Thein Pe business connections to Nay Win Tun: In the 2010 elections, Khun Thein Pe ran unopposed as the PNO candidate for Hopong constituency. In 2014, a Khun Thein Pe, with the same NRC number, was listed as a director of Golden Island Cottages Hotel Group Co., Ltd. A Nay Win Soe/Nay Win Htun, with a NRC number matching that listed against Nay Win Tun in the 2010 election notice is a director of the same company. For parliamentary notices, see The New Light of Myanmar, 'The Union of Myanmar, Union Election Commission, Nay Pyi Taw, Notification No. 119/2010'; 8 November 2010. Golden Island Cottages Hotel Group Co. Ltd. directorships taken from DICA records extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015.
306. Letter from Ruby Dragon Group to Global Witness confirming that Nay Win Tun chaired the *Amyotha Hluttaw* natural resources committee responsible for reviewing Myanmar's mining and gemstones for two consecutive terms in 2012 and 2013. From 18 July 2014, Nay Win Tun was a member (but not the chair) of the committee.
307. The New Light of Myanmar, 'Secretary-1 addresses ceremony to donate over 3,000 tonnes Massive Jade Dyke to the State'; 26 May 2002.
308. See 2013 version of the website, [www.rubydragongroupcompanies.com](http://www.rubydragongroupcompanies.com) (which is referenced on Ruby Dragon Group business cards), accessible via website archive, the Way Back Machine, at <http://web.archive.org/web/20130725033738/http://www.rubydragongroupcompanies.com/>; last accessed 1 October 2015.
309. The New Light of Myanmar, 'Secretary-1 addresses ceremony to donate over 3,000 tons Massive Jade Dyke to the State'; 26 May 2002. Letter from Ruby Dragon Chairman to Global Witness; 2015.
310. The New Light of Myanmar, 'Secretary-1 addresses ceremony to donate over 3,000 tons Massive Jade Dyke to the State'; 26 May 2002.
311. Communication from US Campaign on Burma; 2015. Global Witness meeting with Coca-Cola; 2015.

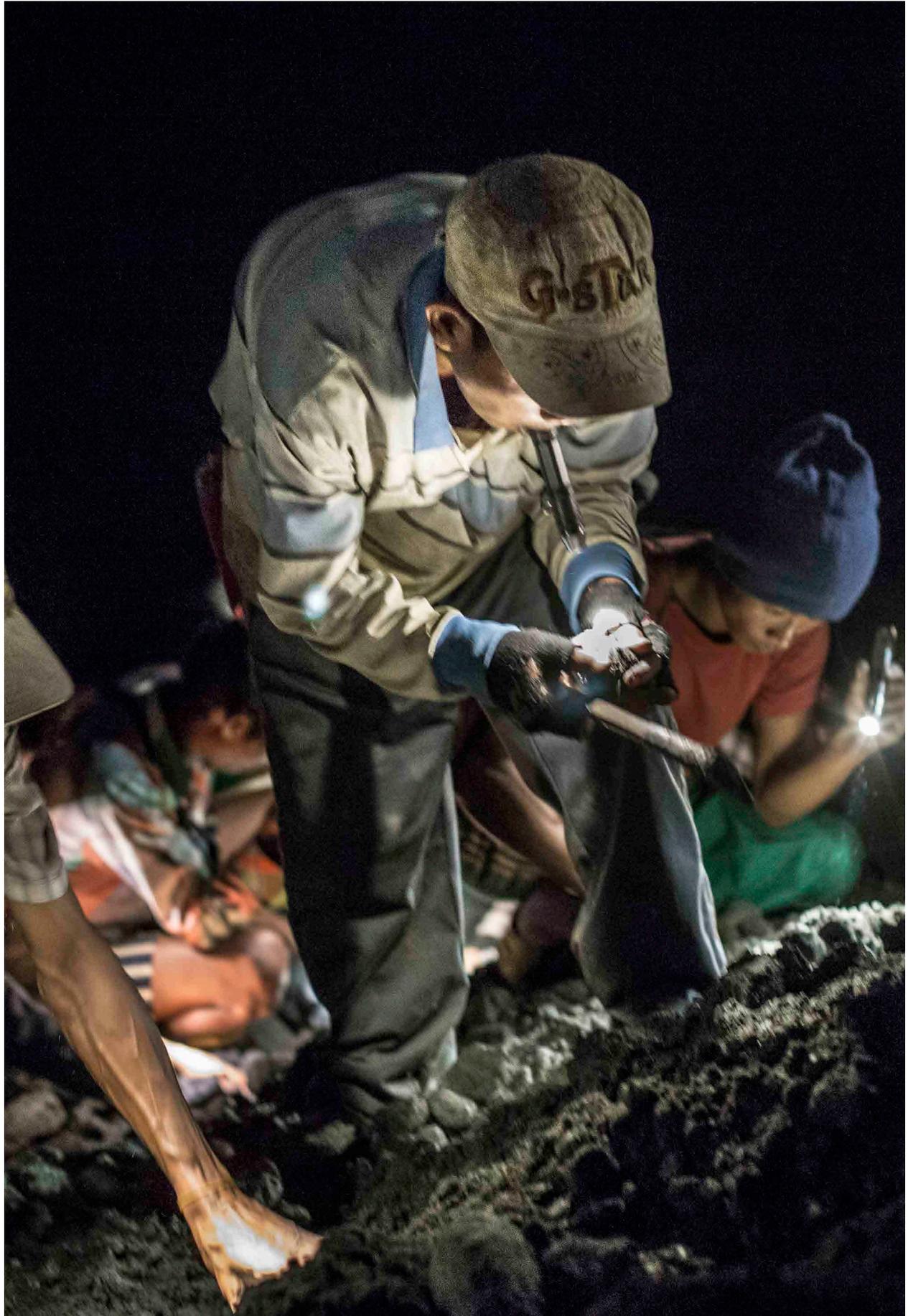
312. Global Witness meeting with Daw Shwe Cynn and U Chaow; 2015. DICA record for Xie Family Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 8 December 2014 (this DICA record, which has a breakdown of shareholdings, is no longer available online). Coca-Cola letter to Global Witness; August 2015.
313. MGE, 'Gwi Hkar Treasure Land and related blocks' map (in use as of mid-2015).
314. Global Witness interviews with industry association representative and a jade businessman; 2015. (Global Witness interviews 488 and 489). The Founder / Sina Daily, 'Jade Smuggling in Burma'; 23 September 2012, <http://style.sina.com.cn/news/b/2012-09-23/0942105939.shtml>, last accessed 14 August 2015. Pingzhou Jade, 'Holding of grand Chinese jewellery industry Summit Forum'; 18 May 2013, [http://www.pzyq.org/Consulting\\_list.asp?id=746](http://www.pzyq.org/Consulting_list.asp?id=746), last accessed 14 August 2015. Ting Zhang / Chinese Jade, 'Customs increased quoted price, caused thousands of tonnes of Pingzhou Jade to be stranded at Hong Kong port'; 1 November 2010, <http://feicui168.com/feicuixinwen/news62243.html>, last accessed 14 August 2015. Pingzhou Jade, 'Pingzhou Jade and Jewellery Association holding half year work reporting along with the election of all the board of directors, board of supervisory members and representatives'; 29 August 2011, [http://www.pzyq.org/Association/news\\_list.asp?id=335](http://www.pzyq.org/Association/news_list.asp?id=335), last accessed 14 August 2015. Judicial Opinions of China, 'Written sentence of second instance for Liupei, Ye, Zhikang, Liu and Liao, Chen's crime of smuggling goods and articles'; 4 June 2015, [http://www.court.gov.cn/zgcpqsw/gd/xs/201506/t20150604\\_8418713.htm](http://www.court.gov.cn/zgcpqsw/gd/xs/201506/t20150604_8418713.htm), last accessed 14 August 2015.
315. US Treasury, 'SDN List by Country', <http://www.treasury.gov/ofac/downloads/ctrylst.txt>, last accessed 14 August 2015.
316. Global Witness meeting with Daw Shwe Cynn and U Chaow; 2015.
317. MEHL, 'Twelfth Annual Report of the Year 2001-2002'; 3 June 2002, reproduced in Sein Htay/Federation of Trade Unions-Burma, 'Economic Report on Burma 2004/05', Annex 3; 2005, [http://www.burmalibrary.org/docs12/FTUB-Economic-Report-Sein\\_Htay2004-05-red.pdf](http://www.burmalibrary.org/docs12/FTUB-Economic-Report-Sein_Htay2004-05-red.pdf), last accessed 28 September 2015.
318. MEHL, 'Twelfth Annual Report of the Year 2001-2002'; 3 June 2002, reproduced in Sein Htay / Federation of Trade Unions-Burma, 'Economic Report on Burma 2004/05', Annex 3; 2005, [http://www.burmalibrary.org/docs12/FTUB-Economic-Report-Sein\\_Htay2004-05-red.pdf](http://www.burmalibrary.org/docs12/FTUB-Economic-Report-Sein_Htay2004-05-red.pdf), last accessed 28 September 2015. Global Witness has asked an expert on the activities of MEHL to review this document and they have stated they believe it to be authentic.
319. MEHL, 'Financial Year 2007-2008 Annual Report', cited in US Embassy Rangoon, 'Burma: State-owned Enterprise Demonstrates Military's Hold on Economy'; 6 February 2009, [https://www.wikileaks.org/plusd/cables/09RANGOON83\\_a.html](https://www.wikileaks.org/plusd/cables/09RANGOON83_a.html), last accessed 20 April 2015.
320. Global Witness meeting with MEHL; 2015. Global Witness meeting with Daw Shwe Cynn and U Chaow; 2015.
321. Myanmar Gems Emporium official sales figures 2014.
322. MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of mid-2014). MGE, 'Map Showing Lone Khin Treasure Land Joint Venture Jade Mining Blocks' (in use as of end of 2012).
323. Global Witness meeting with Daw Shwe Cynn and U Chaow; 2015.
324. Coca-Cola letter to Global Witness; August 2015. The Coca-Cola Company Myanmar, 'Responsible Investment in Myanmar 2015 Update'; 30 June 2015, p.14, <http://photos.state.gov/libraries/burma/895/pdf/20150630TCCCMyanmarDueDiligenceReport.pdf>, last accessed 9 July 2015.
325. Coca-Cola letter to Global Witness; August 2015.
326. Coca-Cola letter to Global Witness; August 2015.
327. Global Witness meeting with Daw Shwe Cynn and U Chaow; 2015. DICA record for Xie Family Co. Ltd retrieved from <http://dica.gov.mm.x-aas.net>; 8 December 2014 (this DICA record, which has a breakdown of shareholdings, is no longer available online).
328. Melanie Keyte / Democratic Voice of Burma, 'Burma: Coca-Cola Hits Back At Military Link Claims'; 3 July 2015.
329. Coca-Cola, 'A History of Coca-Cola Advertising Slogans'; 1 January 2012, <http://www.coca-colacompany.com/stories/coke-lore-slogans>, last accessed 9 July 2015.
330. MSP CAT Company Overview, <http://www.mspscat.com.mm/2012-10-29-04-46-47/1company-overview.html>, last accessed 14 August 2015. DICA records for Myan Shwe Pyi Mining Co. Ltd and Myan Shwe Pyi Tractors Co. Ltd extracted by OpenCorporates; October 2014 and analysed by the Open Knowledge Foundation; March 2015.
331. Zaw Bo Khant, 'Family and Relationships: Family Members', Facebook. Aung Thu Ko, 'Work and Education: Work', Facebook; <https://www.facebook.com/aung.t.ko.5/about?section=education&pnref=about>, last accessed 14 August 2015.
332. Zaw Bo Khant, 'Album: Austrial Trip [sic] [25.09.11-01.10.11]', Facebook; 2 October 2011, <https://www.facebook.com/photo.php?fbid=122023644568234&set=a.122018287902103.18257.100002817985172&type=3&theater>, last accessed 14 August 2015.
333. Zaw Bo Khant, 'Wheel loader 992, caterpillar at demo, spain', Facebook; 13 September 2013, <https://www.facebook.com/photo.php?fbid=417467618357167&set=a.334142283356368.65483.100002817985172&type=3&theater>, last accessed 14 August 2015.
334. Zaw Bo Khant, 'At articulated truck demo ground, peterlie, Newcastle, England', Facebook, 9 September 2013; <https://www.facebook.com/photo.php?fbid=416346311802631&set=a.334142283356368.65483.100002817985172&type=3&theater>, last accessed 14 August 2015.
335. Zaw Bo Khant, 'cat office, Germany', Facebook; 11 September 2013, <https://www.facebook.com/photo.php?fbid=416783348425594&set=a.334142283356368.65483.100002817985172&type=3&theater>, last accessed 14 August 2015.
336. Zaw Bo Khant, 'Caterpillar', Facebook; 16 September 2013 <https://www.facebook.com/photo.php?fbid=418522828251646&set=a.334142283356368.65483.100002817985172&type=3&permPage=1>, last accessed 14 August 2015.
337. Zaw Bo Khant, 'Album: Austrial Trip [sic] [25.09.11-01.10.11]', Facebook; 2 October 2011, <https://www.facebook.com/photo.php?fbid=12201834568415&set=a.122018287902103.18257.100002817985172&type=3&permPage=1>, last accessed 14 August 2015. Zaw Bo Khant, 'golf', Facebook, 14 September 2013, <https://www.facebook.com/photo.php?fbid=417719048332024&set=a.334142283356368.65483.100002817985172&type=3&permPage=1>, last accessed 14 August 2015. Zaw Bo Khant, 'Eiffel Tower ... champagne ...', Facebook; 19 September 2013, <https://www.facebook.com/photo.php?fbid=419400904830505&set=a.334142283356368.65483.100002817985172&type=3&permPage=1>, last accessed 14 August 2015. Zaw Bo Khant, '... Rolex ... euro 39050', Facebook; 19 September 2013, <https://www.facebook.com/photo.php?fbid=419400904830505&set=a.334142283356368.65483.100002817985172&type=3&permPage=1>, last accessed 14 August 2015.
338. Letter from Caterpillar Inc. to Global Witness dated 17 July 2015. Caterpillar Inc.'s Code of Conduct is available at <http://s7d2.scene7.com/is/content/Caterpillar/C10398712>.
339. Letter from Caterpillar Inc. to Global Witness dated 17 July 2015.

340. Letter from Caterpillar Inc. to Global Witness dated 17 July 2015.
341. Letter from Caterpillar Inc. to Global Witness dated 17 July 2015.
342. See for example Bertil Lintner & Michael Black, 'Merchants of Madness: The Methamphetamine Explosion in the Golden Triangle', Silkworm Books; 2009, p.99.
343. As the US Administration eased sanctions on Myanmar, it put in place new reporting requirements for US companies investing US\$500,000 or more in the country. Under these rules, which took effect in 2013, US companies that fall into this category are required to report annually on their Myanmar operations, providing details including an overview of their business activities, information on their anti-corruption and human rights policies, and any corruption or human rights risks identified together with actions taken to address these risks. For further details, see: Embassy of the United States in Rangoon, Burma, 'Reporting Requirements'; <http://burma.usembassy.gov/reporting-requirements.html>, last accessed 1 July 2015. At the time of writing, Caterpillar Inc. has not filed a report for 2013, 2014 or 2015. In May 2015, a group of institutional investors wrote a joint letter to non-complying companies, including Caterpillar Inc., urging them to submit timely and comprehensive reports in line with the US rules. Conflict Risk Network, 'Investors call for robust corporate reporting on Burma/Myanmar', 24 June 2015; <https://www.linkedin.com/company/zevin-asset-management-zam->, last accessed 5 July 2015.
344. Global Witness telephone conversation with Caterpillar Inc. on 14 July 2015.
345. Letter to Global Witness from Caterpillar Inc. dated 17 July 2015.
346. For full copy of letter to President Thein Sein dated 2 October 2014, please see <https://www.globalwitness.org/campaigns/myanmar/>.
347. Communication from KDNG; 2015.
348. Global Witness interview with Kachin businessman; 2014. (Global Witness interview 135-A).
349. Global Witness interviews with church leader, a KIA/KIO representative and a jade businessman; 2014 and 2015. (Global Witness interviews 286, 130-B, and 139-B).
350. Global Witness interview with Kachin church leader; 2014. (Global Witness interview 139-B).
351. KDNG interview with former jade trader; 2015. (KDNG interview 31).
352. Global Witness interviews with Kachin community leaders and KDNG interviews with residents of Hpakant; 2014. (Global Witness interviews 243-C and 239-A, KDNG interview 18-E).
353. Over the past 20 years, the government has passed a series of regulations which restrict rights to holding, selling or transporting jade, with the result that the possession of jade by Kachins is, in most cases, a criminal act. These regulations include: Ministry of Mines Order 11/97, 'List of border towns where the trade in gemstones is banned', 4 December 1997; Ministry of Mines Order 19/2000, 'Designation of specific routes for transport of raw jade stones', 9 March 2000; 'Kachin State Peace and Development Council Local Order No.1/2000', 25 March 2000; Ministry of Mines, 'Regulations on transporting of raw jade stones', 9 March 2003; Ministry of Mines, 'Designation of areas where raw jade stones can be legally carried', 7 October 2007; Ministry of Mines, 'Designation of areas where raw jade stones can be legally carried', 22 May 2012.
354. Global Witness interview with jade businessman; 2014. (Global Witness interview 142-A).
355. Global Witness interviews with four jade businessmen; 2014. (Global Witness interviews 135, 136, 240 and 377).
356. Global Witness interview with Kachin community leader; 2014. (Global Witness interview 239-C).
357. Global Witness interview with jade businessman; 2015. (Global Witness interview 135-E).
358. Global Witness interview with Kachin community leader; 2014. (Global Witness interview 239-C).
359. Global Witness interviews with two jade businessmen; 2015. (Global Witness interviews 6-C and 65).
360. Kachin State is home to a range of ethnic groups, notably ethnic Kachins who make up an estimated 38.1% of the 1.7 million population; as well as Bamar and Shan who account for, respectively, an estimated 29.3% and 24.2%; as well as many other smaller groups. UNDP, 'The State of Local Governance: Trends in Kachin'; 2015; [http://www.mm.undp.org/content/dam/myanmar/docs/Publications/PovRedu/Local%20Governance%20Mapping/UNDP\\_MM\\_State\\_of\\_Local\\_Governance\\_Kachin\\_ENG.pdf](http://www.mm.undp.org/content/dam/myanmar/docs/Publications/PovRedu/Local%20Governance%20Mapping/UNDP_MM_State_of_Local_Governance_Kachin_ENG.pdf), last accessed 15 August 2015.
361. Global Witness with jade businessman; 2014. (Global Witness interview 332).
362. Global Witness interview with local resident who worked in the jade business until a decade ago; 2014. (Global Witness interview 243-C).
363. Global Witness and KDNG interviews with current and former jade businessmen; 2014 and 2015. (Global Witness interviews 8, 9, 332, 239-C and 136-E. KDNG interview 35). The Irrawaddy, 'Floods Displace Over 1,000 People in Hpakant'; 25 August 2015, <http://www.irrawaddy.org/burma/floods-displace-1000-people-hpakant.html>, last accessed 5 October 2015. Eleven Media, 'Jade firms blamed for floods in Hpakant region'; 18 August 2014, <http://www.euro-burma.eu/news/show/1524/>, last accessed 5 October 2014. Aung Hein Min / Eleven Media, 'Local residents of Hpakant town and surrounding villages worried about flooding in the rainy season due to soil dumping into Ever Lake by jade companies' seven tracts'; 2 May 2015 [translated from Myanmar language to English by Global Witness].
364. KDNG interview with local resident; 2015. (KDNG interview 46).
365. Film footage provided by local resident; 2015. Footage of the same incident (which does not identify the site as a Myat Yamon mine) can also be accessed at Radio Free Asia, 'Unbridled Jade Mining Triggers Deadly Landslides in Myanmar', <https://www.youtube.com/watch?v=rWd1PSluDe0>, last accessed 5 October 2015. Global Witness interviews with jade businessman and local residents; 2015. (Global Witness interviews 404 and 128-G). Xinhua, 'Nearly 70 missing in landslide in Myanmar's jade mining area'; 9 April 2015, [http://news.xinhuanet.com/english/2015-04/09/c\\_134138004.htm](http://news.xinhuanet.com/english/2015-04/09/c_134138004.htm), last accessed 5 October 2015.
366. Global Witness interviews with local residents; 2015. (Global Witness interviews collectively referenced as 128-G).
367. KDNG interviews with accident victims, victims' families and with local residents; 2015. (KDNG interviews referenced collectively as 18-M). KDNG interviews with the families of accident victims, victims' families and with local residents, together with photographs of incidents; 2015. (KDNG interviews collectively referenced as 18-J).
368. Global Witness interview with local resident; 2015. (Global Witness interview 33). KDNG interview with local resident; 2015. (KDNG interview 35).
369. KDNG interview with church leader; 2015. (KDNG interview 38).
370. KDNG interviews with local residents and with jade businessman; 2015 (KDNG interview 35, 39, 40, 41, 50 and 53).

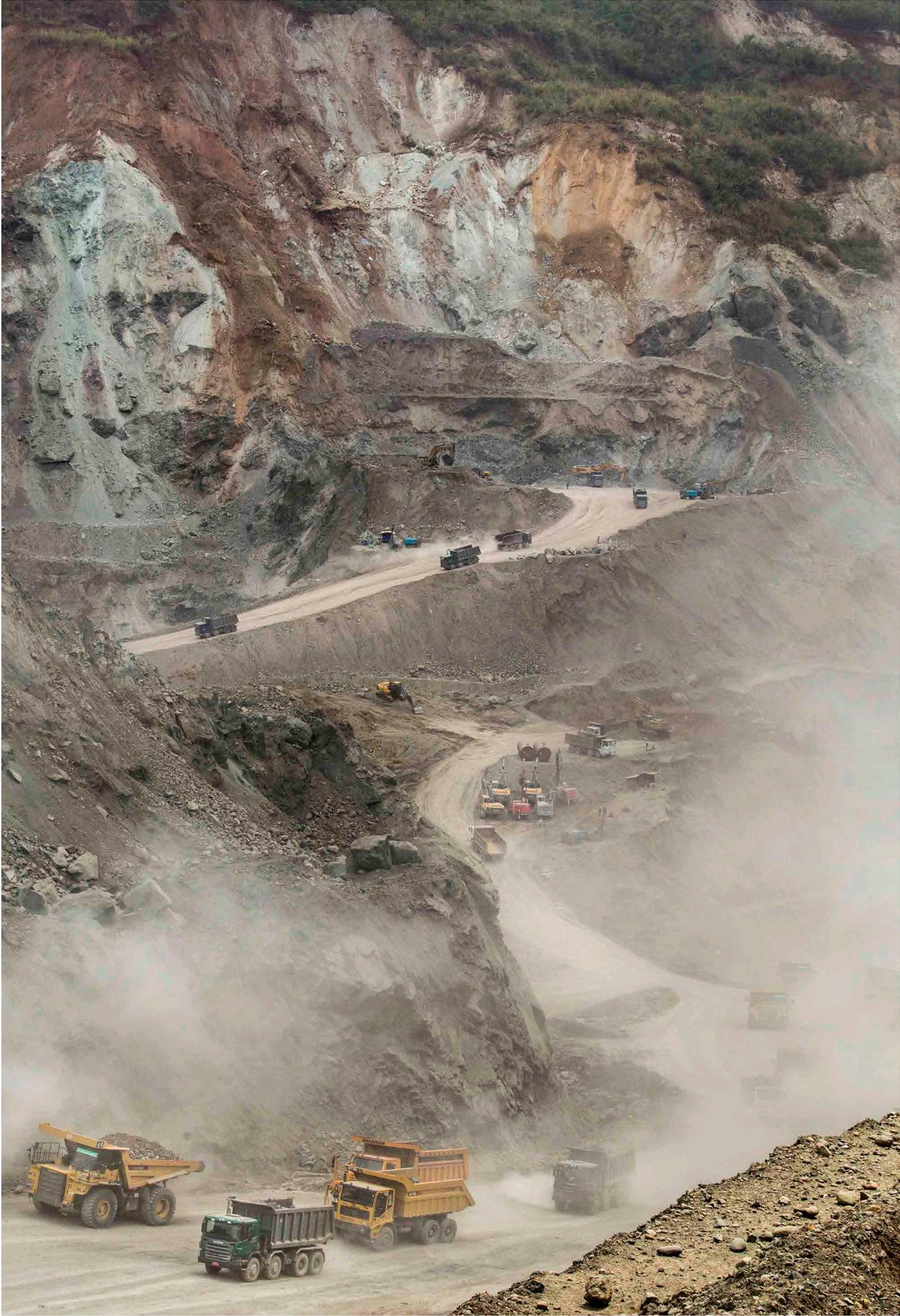
371. KDNG interview with local resident; 2014. (KDNG interview 53).
372. Global Witness interviews with jade company employee and with Kachin church leader; 2014. (Global Witness interviews 72 and 139-B). Andrew RC Marshall and Min Zayar Oo / Reuters, 'Myanmar's old guard runs a jade empire'; 29 September 2013, <http://graphics.thomsonreuters.com/13/09/MYANMAR-JADE.pdf>, last accessed 4 October 2015. Dan Levin / The New York Times, 'Searching for Burmese Jade, and Finding Misery', 1 December 2014, [http://www.nytimes.com/2014/12/02/world/searching-for-burmese-jade-and-finding-misery.html?\\_r=0](http://www.nytimes.com/2014/12/02/world/searching-for-burmese-jade-and-finding-misery.html?_r=0), last accessed 4 October 2015.
373. Global Witness interviews with community leader and local resident; 2015. (Global Witness interviews 322 and 428). Global Witness interview with journalist; 2015. (Global Witness interview 410).
374. Global Witness interview with ethnic Rakhine miners who said they now numbered 150,000 in Hpakant and interviews with local residents, a KIA/KIO representative and a jade miner; 2014. (Global Witness interviews 259, 492, 63 and 68).
375. Global Witness interview with yemase collector; 2014. (Global Witness interview 336). The other quotes and comments in this box come from the same source unless indicated otherwise.
376. Lawi Weng, Irrawaddy, 'Villagers to protest over grisly death of Kachin jade picker'; 18 November 2014, <http://www.irrawaddy.org/burma/villagers-protest-grisly-death-kachin-jade-picker.html>, last accessed 2 October 2015. Eleven Media Group, 'Kachin protesters demand slice of mining wealth'; 22 November 2014, <http://www.kdng.org/news/34-news/430-kachin-protesters-demand-slice-of-mining-wealth.html>, last accessed 2 October 2015.
377. KDNG interviews with local community and Global Witness interview with Kachin community leader; 2014. (KDNG interviews collectively referenced as 19-D and Global Witness interview 243-C).
378. Eleven Media Group, 'Kachin protesters demand slice of mining wealth'; 22 November 2014, <http://www.kdng.org/news/34-news/430-kachin-protesters-demand-slice-of-mining-wealth.html>, last accessed 2 October 2015.
379. Global Witness interview with small-scale jade businessman, 2014. (Global Witness interview 135-F).
380. Quoted in Transnational Institute / Burma Centrum Nederland, 'The Kachin Crisis: Peace Must Prevail'; March 2013, p.13, <http://www.tni.org/sites/www.tni.org/files/download/bpb10.pdf>, last downloaded 4 October 2015, and on a range of blog sites, e.g. <https://www.xing.com/communities/posts/oliver-massmann-myanmar-news-and-regulations-1004093807> and [http://blog.sina.com.cn/s/blog\\_63ec24f50102ek1r.html](http://blog.sina.com.cn/s/blog_63ec24f50102ek1r.html), both last accessed 4 October 2015. The original news article in which this comment was first reported appears no longer to be available online.
381. Global Witness interviews with humanitarian worker and a journalist; 2014. (Global Witness interviews 202-B and 89-B). Yun Sun / Stimson Center, 'China, the United States and the Kachin Conflict'; 2014, p.4, [http://www.stimson.org/images/uploads/research-pdfs/Myanmar\\_Issue\\_Brief\\_No\\_2\\_Jan\\_2014\\_WEB\\_3.pdf](http://www.stimson.org/images/uploads/research-pdfs/Myanmar_Issue_Brief_No_2_Jan_2014_WEB_3.pdf), last accessed 4 October 2015.
382. Human Rights Watch, 'Untold Miseries: Wartime Abuses and Forced Displacement in Burma's Kachin State', Chapter 2; March, 2012, [http://www.hrw.org/sites/default/files/reports/burma0312ForUpload\\_1.pdf](http://www.hrw.org/sites/default/files/reports/burma0312ForUpload_1.pdf), last accessed 9 August 2015.
383. Fortify Rights, 'I thought they would kill me', Chapters II, III and IV; June 2014, [www.fortifyrights.org](http://www.fortifyrights.org), last accessed 9 August 2015.
384. See for example Jenny Hedström, 'Gender and Myanmar's Kachin conflict', New Mandala; 27 July 2015, <http://asiapacific.anu.edu.au/newmandala/2015/07/27/gender-and-myanmars-kachin-conflict>, last accessed 9 August 2015. Women's League of Burma (WLB), 'Same Impunity, Same Patterns – Sexual Abuses by the Burma Army Will Not Stop Until There Is a Genuine Civilian Government', pp.14-15; January 2014, <http://wom-enofburma.org/same-impunity-same-pattern-report-of-systematic-sexual-violence-in-burmas-ethnic-areas>, last accessed 4 October 2015.
385. Global Witness interview with humanitarian worker; 2015. (Global Witness interview 202). Report on security situation in Hpakant from a confidential source; 2015.
386. Mandy Sadan, 'Being and Becoming Kachin', the British Academy / Oxford University Press, 2013, Chapters 6 and 7. Carine Jaquet, 'The Kachin Conflict – Testing the Limits of the Political Transition in Myanmar', IRASEC; 2015, pp. 22-25 and Chapter 2, <http://www.ifre.fr/c/35429>, last accessed 1 September 2015.
387. Global Witness interview with local official and with Kachin politicians; 2014 and 2015. (Global Witness interviews 8, 9 and 45). Letter from the KIA/KIO to Global Witness; 2015. Kevin Woods, 'Ceasefire capitalism: military-private partnerships, resource concessions and military-state building in the Burma-China borderlands', *Journal of Peasant Studies*, 38:4; 2011, p. 750. Thant Myint-U, 'Where China Meets India – Burma and the New Crossroads of Asia'; 2011, Farrar Strauss and Giroux, p. 96. Bertil Lintner, 'Land of Jade', Orchid Press; 2011 (first published 1989), p. 164. Global Witness, 'A Conflict of Interests – The Uncertain Future of Burma's Forests'; 2003, p. 93, <https://www.globalwitness.org/sites/default/files/import/03sep3%20Conflict%20of%20Interests90-127.pdf>, last accessed 2 September 2015.
388. Global Witness interview with Kachin politician and KIA/KIO representatives; 2015. (Global Witness interviews 474 and 474). Communication from Bertil Lintner; 2015. Global Witness, 'A Conflict of Interests – The Uncertain Future of Burma's Forests'; 2003, p. 93, <https://www.globalwitness.org/sites/default/files/import/03sep3%20Conflict%20of%20Interests90-127.pdf>, last accessed 2 September 2015.
389. Global Witness interviews with Kachin politician and KIA/KIO staff; 2015. (Global Witness interviews 387 and 388). Communication from Bertil Lintner; 2015.
390. Global Witness interview with church leader; 2014. (Global Witness interview 139-B). Tom Kramer, 'The United Wa State Party: Narco-Army or Ethnic Nationalist Party?', *Institute for Southeast Asian Studies*; 2007, p. 43. Global Witness, 'A Conflict of Interests – The Uncertain Future of Burma's Forests'; 2003, p. 93, <https://www.globalwitness.org/sites/default/files/import/03sep3%20Conflict%20of%20Interests90-127.pdf>, last accessed 31 August 2015.
391. Global Witness interviews with civil society representative and a jade businessman; 2014 and 2015. (Global Witness interviews 185 and 54). Kevin Woods, 'Ceasefire capitalism: military-private partnerships, resource concessions and military-state building in the Burma-China borderlands', *Journal of Peasant Studies*, 38:4; 2011, pp. 756-757. Global Witness, 'A Choice for China – Ending the Destruction of Burma's Northern Frontier Forests'; 2005, p. 57, <https://www.globalwitness.org/archive/choice-china-ending-destruction-burmas-frontier-forests>, last accessed 31 August 2015.
392. Global Witness interviews with church leader, a civic leader, a civil society representative and a political analyst; 2014 (Global Witness interviews 139-B, 10-B, 145-A and 197-B). Global Witness, 'A Choice for China – Ending the Destruction of Burma's Northern Frontier Forests'; 2005, p. 8, <https://www.globalwitness.org/archive/choice-china-ending-destruction-burmas-frontier-forests>, last accessed 31 August 2015. International Crisis Group, 'A Tentative Peace in Myanmar's Kachin Conflict'; June 2013, p. 5, <http://www.crisisgroup.org/~media/Files/asia/south-east-asia/burma-myanmar/b140-a-tentative-peace-in-myanmars-kachin-conflict.pdf>, last accessed 4 October 2015.
393. Yun Sun / Stimson Center, 'China, the United States and the Kachin Conflict'; 2014, p.4, [http://www.stimson.org/images/uploads/research-pdfs/Myanmar\\_Issue\\_Brief\\_No\\_2\\_Jan\\_2014\\_WEB\\_3.pdf](http://www.stimson.org/images/uploads/research-pdfs/Myanmar_Issue_Brief_No_2_Jan_2014_WEB_3.pdf), last accessed 4 October 2015. International Crisis Group, 'A Tentative Peace in Myanmar's Kachin Conflict'; June 2013, pp. 6-7, <http://www.crisisgroup.org/~media/Files/asia/south-east-asia/burma-myanmar/b140-a-tentative-peace-in-myanmars-kachin-conflict.pdf>, last accessed 4 October 2015. Transnational Institute / Burma Centrum Nederland, 'The Kachin Crisis: Peace Must Prevail'; March 2013, p.5, <http://www.tni.org/sites/www.tni.org/files/download/bpb10.pdf>, last accessed 4 October 2015.

394. Global Witness interviews with political analyst and a KIA/KIO official; 2014. (Global Witness interview 197 and 130-B). International Crisis Group, 'A Tentative Peace in Myanmar's Kachin Conflict'; June 2013, pp. 5-7, <http://www.crisisgroup.org/~media/Files/asia/south-east-asia/burma-myanmar/b140-a-tentative-peace-in-myanmars-kachin-conflict.pdf>, last accessed 4 October 2015.
395. Global Witness interview with jade businessman; 2014. (Global Witness interview 14-E).
396. References for points in this paragraph are set out in Chapter 2.
397. Global Witness interview with KIA/KIO officials; 2015. (Global Witness interview 395-398) International Crisis Group, 'Myanmar: the politics of economic reform',
398. Asia Report N°231; July 2012, pp. 11 and 12, <http://www.crisisgroup.org/~media/files/asia/south-east-asia/burma-myanmar/231-myanmar-the-politics-of-economic-reform.pdf>, last accessed 4 October 2015.
399. Global Witness interviews with former official and four jade businessmen; 2014 and 2015. (Global Witness interviews 256-B, 14, 135-B, 6-A and 218-B).
400. Global Witness interviews with two jade businessmen, three KIA/KIO officials, a journalist and one local researcher; 2014 and 2015. (Global Witness interviews 130-B, 261, 313, 337-E, 404, 475 and 476).
401. Global Witness interview with jade businessman; 2014. (Global Witness interview 377-B).
402. Global Witness interviews with seven jade businessmen, local residents and a community leader; 2014 and 2015. (Global Witness interviews 48, 49, 51, 65, 67, 68, 176, 218, 377-C).
403. Global Witness interviews with two jade businessmen; 2015. (Global Witness interviews 218-B and 377-B).
404. Global Witness interviews with a Tatmadaw officer, a KIA/KIO representative, a civil society representative, a local politician, a church representative, a group of jade businessmen and four individual jade businessmen; 2014 and 2015. (Global Witness interviews 14, 140, 218-B, 234, 243, 259, 350, 353, 377, 479 and 490).
405. The data in this map is based on interviews with seven jade businessmen and one civil society representative; 2014 and 2015. (Global Witness interviews 47, 101, 142, 234, 350, 352, 353 and 377).
406. Global Witness interview with a Tatmadaw officer and three jade businessmen; 2014. (Global Witness interviews, 479, 14-B, 263, 142-C).
407. Global Witness interview with jade businessman, a humanitarian worker and a civil society representative; 2014 and 2015. (Global Witness interviews 234, 142-B and 202-B).
408. Global Witness interviews with two jade businessmen; 2014. (Global Witness interview 142-C and 377-A).
409. Global Witness interview with humanitarian worker; 2014. (Global Witness interview 202-C).
410. Global Witness interview with civil society representative; 2014. (Global Witness interview 234).
411. Global Witness interview with humanitarian worker; 2014. (Global Witness interview 202-B).
412. Global Witness interview with jade businessman; 2015. (Global Witness interview, 404).
413. Global Witness interviews with KIA/KIO officials; 2014. (Global Witness interview 66).
414. Global Witness interviews with two jade businessmen; 2014. (Global Witness interviews 65 and 67).
415. Global Witness interview with jade businessman; 2014. (Global Witness interview 65).
416. Global Witness interview with KIA/KIO official; 2002.
417. Letter from the KIA/KIO; 2015.
418. Global Witness interviews with KIA/KIO officials and a community leader; 2014 and 2015. (Global Witness interviews 52 and 66).
419. Global Witness interview with a jade businessman who gave the specific figures; 2014. (Global Witness interview 2). Supporting information on the taxation by the KIA/KIO: Letter from the KIA/KIO; 2015 and Global Witness interviews with KIA/KIO officials and a local politician; 2014. (Global Witness interviews 66 and 239-C).
420. Global Witness interview with political analyst who gave the specific figure and a humanitarian worker who provided more general information on the very large sums involved; 2014. (Global Witness interviews 197-C and 202).
421. Global Witness interviews with a political analyst and a civic leader; 2014 and 2015. (Global Witness interviews 197 and 134).
422. Global Witness interviews with KIA/KIO officials, a civic leader and a humanitarian worker; 2014 and 2015. (Global Witness interviews 134, 202 and 395).
423. Global Witness interviews with KIA/KIO official and a jade businessman; 2014. (Global Witness interviews 135 and 260).
424. *ibid.*
425. Letter from KIA/KIO; 2015.
426. Global Witness interview with KIA/KIO officials; 2015. (Global Witness interview 395).
427. Global Witness interviews with two jade businessman; 2015. (Global Witness interviews 187 and 117).
428. Letter from KIA/KIO; 2015.
429. Global Witness interviews with two civic leaders, three jade businessman and local residents; 2014 and 2015. (Global Witness interviews 6-C 10, 67, 68, 134-B and 176).
430. Global Witness interview with a group of jade businessmen, a church representative and a KIA/KIO representative; 2014 and 2015. (Global Witness interviews 45, 130 and 250).
431. Global Witness interviews with jade businessman and a political analyst; 2014. (Global Witness interviews 142-C and 197-B). Communication from KDNG; 2014.

432. Global Witness interview with jade businessman; 2014. (Global Witness interview 350). Letter from KIA/KIO; 2015. Communication from KDNG; 2014.
433. Global Witness interviews with former jade businessman and a researcher; 2014. (Global Witness interview 491 and 232). Dan Levin / The New York Times, 'Searching for Burmese Jade, and Finding Misery', 1 December 2014, [http://www.nytimes.com/2014/12/02/world/searching-for-burmese-jade-and-finding-misery.html?\\_r=0](http://www.nytimes.com/2014/12/02/world/searching-for-burmese-jade-and-finding-misery.html?_r=0), last accessed 4 October 2015.
434. Global Witness interviews with a jade businessman, a former jade industry expert and a jade industry expert; 2014 and 2015. (Global Witness interviews 11, 176 and 491).
435. Global Witness interview with jade businessman; 2015. (Global Witness interview 176).
436. Global Witness interview with former KIO official; 2014. (Global Witness interview 181).
437. *ibid.*
438. Global Witness obtained two data sets on historic annual production, one government-produced data-set and a second industry-produced data set. The latter was more comprehensive, including both weight of sales and valuations of sales, and we have therefore used this data set for the purposes of our calculations.
439. Ash Center for Democratic Governance and Innovation, Harvard Kennedy School/Proximity Designs/Rajawali Foundation Institute for Asia, 'Creating a Future: Using Natural Resources for New Federalism and Unity'; July 2013, <http://ash.harvard.edu/links/creating-future-using-natural-resources-new-federalism-and-unity>, last accessed 1 August 2015.
440. A very few lines of data from the 2014 Emporium sales breakdown have been excluded because they are incomplete. They represent only a small fraction of the total sales, and we assume that their exclusion does not have a significant impact on our calculations.
441. Industry records of the weights and values of jade emporium sales since 2005.
442. *ibid.*
443. Government of Myanmar, 'Statistical Yearbook 2011', p.237. Central Statistical Organization, 'Production of Precious Minerals and Pearls', 2012-2015 data, [www.csostatat.gov/s2.5MA02.htm](http://www.csostatat.gov/s2.5MA02.htm), last accessed 22 September 2015.
444. Jade businessmen, traders and a KIA/KIO official interviewed by Global Witness in Myanmar and China gave consistent accounts of companies selling some jade at the official emporium whilst smuggling the rest directly to China. Three jade businessmen estimated that 'big companies smuggle at least 50% of the good jade they produce'. A prominent jade owner estimated that 60-70% goes straight to the border', another that '80% of jade from Hpakant is smuggled', an experienced jade businessman and trader that since 2011 50% of jade is typically smuggled. One Chinese jade trader suggested that '80% of production is smuggled' whilst another said that 'outside trade is more than 5-10 times legal trade'. A KIA/KIO official stated that 80% of jade is smuggled out and sold on the black market. Only one interviewee gave an estimate of less than half, but he went to explain that the majority of legal sales are subject to price manipulation and tax evasion (Global Witness interviews 175/243/263-B, 5A-AG, 6-C, 135-G, 384-A, 218, 259-260 and 411). See also Eleven, 'Timber, jade account for more than half of smuggled goods seized'; 22 October 2014, [http://www.elevenmyanmar.com/index.php?option%3Dcom\\_content%26view%3Darticle%26id%3D7909:timber-jade-account-for-more-than-half-of-smuggled-goods-seized%26catid%3D44:national%26Itemid%3D384](http://www.elevenmyanmar.com/index.php?option%3Dcom_content%26view%3Darticle%26id%3D7909:timber-jade-account-for-more-than-half-of-smuggled-goods-seized%26catid%3D44:national%26Itemid%3D384), last accessed 2 June 2015.
445. There were actually two domestic fairs in 2014. However, there is no weight data publicly available for the January 2014 sale and it was far smaller than the October 2014 fair.
446. These recalculations are based on data on the weight and sales revenue data on the October 2014 local fair provided by the Myanmar Gems and Jewellery Entrepreneurs Association. The January 2014 fair was a smaller event, and Global Witness has not been provided with weight and sales revenue for this fair. We have not therefore taken account of it in our calculations.
447. Myanmar Gems Emporium official sales figures 2014. MGJEA, '50th Myanmar Gems Emporium Report', Appendix E: Number and Weight of Jade Lots from 2006 June/July Special Exhibition to 50th Myanmar Gems Emporium, undated.
448. Myanmar Gems Emporium official sales figures 2014. Ministry of Mines, Myanmar Gems Emporium Central Committee, 'Myanmar Gems Emporium Sales (1964 to 2013)', undated. Sales data in euros converted to U.S. dollars at exchange rate for the relevant period.
449. Global Witness interviews with jade traders, two jade businessmen and the employee of a jade company; 2015. (Global Witness interviews 124, 54-AG, 14-G and 427).
450. Chinese trade data taken from UN Comtrade Database (<http://comtrade.un.org/>) using HS codes: 710310 (Precious stones – rough); 710399 (Precious stones); and 722620 (Articles of precious stones). These values may include other items beside jade, but a number of Myanmar's other gems exports are covered by other HS codes. Diamonds are explicitly excluded from HS 710399, whilst rubies emeralds and sapphires fall within another code [HS 710391]. Given the dominance of jade in Myanmar's production, it is likely that the vast majority of given figures for HS 710399 reflect the trade in jade. Note that missing figures indicate that Chinese customs data did not report quantity of imports from 2012 onwards for HS 710299, likely because different measures were used in the collection of data. Sub-codes are not available through the UN Comtrade database and it is therefore not possible to determine the exact weight per kilogram. However, export values are still reported. For 2014, Chinese import data records were used as an additional source of trade data with Myanmar (for the same codes).
451. Global Witness interviews with MGE and with MGJEA; 2014 and 2015.
452. Letter from MGE to Global Witness.
453. It should be noted that for a very small number of lots, information was incomplete, so it is not clear whether or not they were a *kyo thu*. For these lots, we have assumed that the ratio is the same as for the vast majority of the lots on which we have complete data.



CREDIT: Minzayar



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