



# MINING IN WAR-TORN MYANMAR

Myanmar is a multi-ethnic nation of 51 million people. Approximately 70% of the population relies on farming for their subsistence and livelihood. Located at an intersection of eco-regions, Myanmar is a global storehouse of biodiversity and carbon. The country is also tremendously rich in mineral resources, which together with oil and gas, make up 63% of total annual exports.

Armed conflict between central authorities and ethnic groups seeking to secure self-determination has raged since independence in 1948 and continues in parts of the country to this day. In 2008, after decades of military dictatorship, the military enacted a new constitution to maintain key powers and continue its control over natural resources even after allowing elections. Since 2011, leaders have announced to the international community that Myanmar has transformed from a military dictatorship to a “civilian-led” democratic government. Several countries lifted long-standing sanctions and international investors hungry for Myanmar’s untapped resources have increasingly flocked to Asia’s “last frontier.”

Mining and extractive industries have precipitated mass evictions and caused devastating environmental destruction. Although the massive Letpadaung copper mine in central Myanmar, jade mines in the north, and oil and gas in the southeast and west of Myanmar have received widespread attention, mining is extensive across the country. Far from contributing to development, mining has sapped poverty stricken areas in order to enrich the military, domestic cronies, and foreign investors. This has exacerbated inequalities, further fueling the conflict. Hundreds of thousands remain in displacement camps or have become landless.

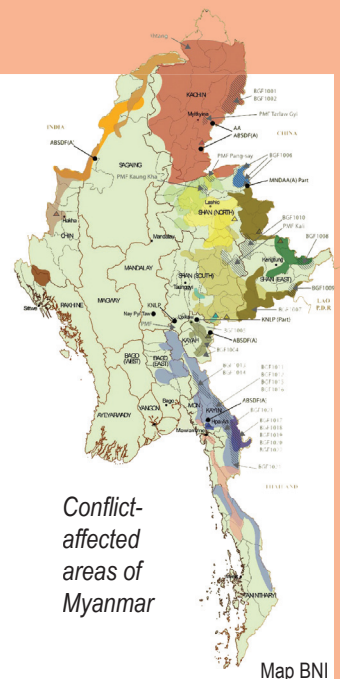
In 2015, the National League for Democracy party, led by

democracy icon Daw Aung San Suu Kyi, won over 60% of votes and formed a new government under the military constitution. Since then, attacks on ethnic armed groups have increased, especially in areas with mineral resources. At the same time, the military continues to exert its unchecked power in the government and in business.

Myanmar remains far behind its regional neighbors in almost all development indicators—infant mortality is 250 percent higher than the average across Southeast Asia—and it ranks among the lowest in the world in terms of resource governance and transparency.<sup>1</sup> Yet the country is one of the few places on earth with intact tropical forests containing endangered species. Millions of indigenous people continue to manage precious watersheds, animal habitats, and rare plants according to protective customary practices.

At this critical time, when growing investment in resource extraction is driving farmers off their lands and fuelling the flames of long standing conflict, there must be a moratorium on non-artisanal mining in Myanmar until a new devolved federal constitution and relevant legislations are adopted in accordance with a future Union Peace Accord.

This paper is based on research by local organizations whose communities are suffering from the impacts of mining projects.



*Conflict-affected areas of Myanmar*

Map BNI

# MYANMAR'S MINING INDUSTRY:

Excluding affected peoples, fueling conflict

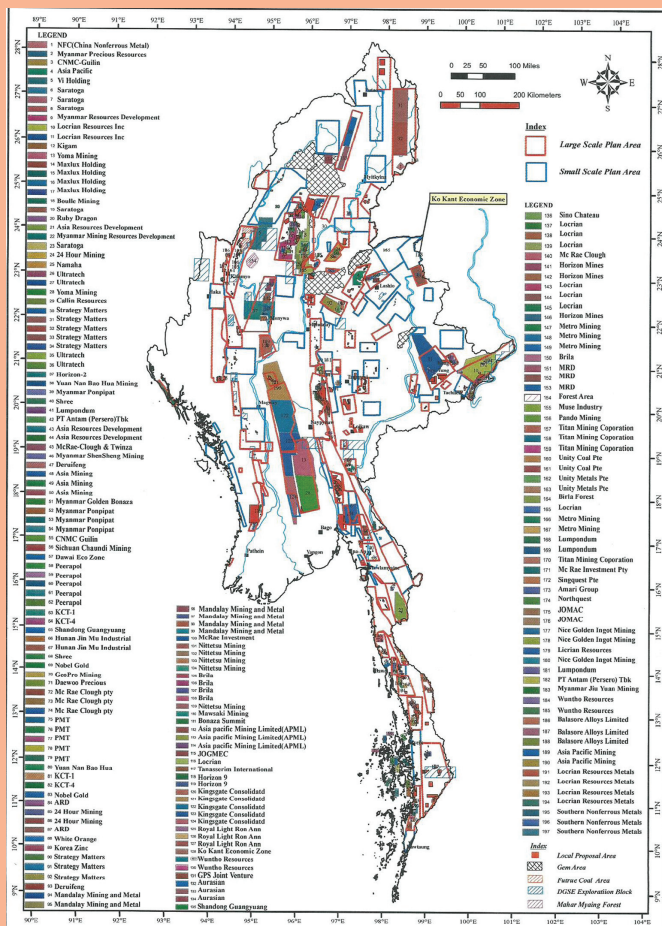
Despite having fourteen distinct states and regions, the central, or Union, government of Myanmar maintains near complete control on all matters related to resource extraction, from approval of projects to revenue collection and disbursement. The 2008 constitution pronounces that:

*“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.”*

State and regional legislatures have almost no powers to influence how the mining industry works. For example, for gemstones, they may enact legislation only about cutting and polishing, but may not legislate the concession process, labor or environmental protections. Myanmar's Investment Commission, which approves large-scale mining projects, has no local representatives. The centralized structure of Myanmar's government systematically excludes affected peoples from decisions about whether, and how, to mine resources in their home areas.

## SLICED AND DICED:

Large-scale and Foreign Direct Investment concession areas, 2015



Myanmar Department of Geological Survey and Mineral Explorer

*Unchecked military power is standard procedure in Myanmar's parliament*



Photo AFP

Once resources are extracted, they are often exported to far away cities and foreign countries, and sales revenues flow to the central government. Benefits rarely reach back to local peoples.

The constitution says “the Union shall enact necessary law to supervise extraction and utilization of State owned natural resources by economic forces.” However, laws and mechanisms to prevent negative impacts, and capacity to regulate the industry, are practically non-existent. Citizen monitors are often harassed and intimidated by authorities and it remains extremely difficult to access basic data about mining operations.

The 2008 constitution enshrines the military's role in the government, granting 25% of parliament seats to military personnel and putting key ministries under the control of the Commander-in-Chief of the Defense Services. The military also directly benefits from mining projects through revenue flows to its own company, the United Myanmar Economic Holdings Limited (UMEHL), which often acts as a joint venture partner in mining projects – including with China's state-owned Wanbao company in the Letpadaung copper mine. Mining operations also improve military access to strategic ethnic areas. Within the context of the current conflict in Myanmar, mining investments are not simply an economic calculation; they very clearly favor—and benefit—one side in the civil war, and are endangering an already extremely fragile peace process.

Despite this, international actors ranging from the World Bank to “responsible investment” NGOs are encouraging reforms that will attract foreign investors and make it easier for them to commence mining operations.

<sup>1</sup> See <http://myanmar.unfpa.org/publications/thematic-report-mortality> and <https://resourcegovernance.org/analysis-tools/publications/2017-resource-governance-index>

## WHO BENEFITS?

Photo EPA



**The military** gains huge revenues and strategic access and control to ethnic areas. There is no transparency or accountability on how much money they receive or how they use it

**The central government** collects revenues and taxes, and determines how they are spent, favoring industrial over agricultural development

**Foreign companies and industries** in Special Economic Zones and neighboring countries use Myanmar's cheap resources for profits

**Foreign consumers** benefit from cheap electricity and jewelry

**Domestic cronies** increase their profits without accountability, increasing their influence in society

## WHO LOSES?



Photo Bridge

**The displaced** have practically no land rights and receive limited to no compensation: losing their land is devastating to livelihoods

**Local peoples** suffer health and livelihood impacts, can only get low wage and dangerous jobs in the mines, and bear the costs of rampant drug use and HIV infection

**Women** face specific health impacts, are pushed into the sex industry, and are particularly vulnerable to increased military presence

**The environment** is destroyed by deforestation, land, air and water contamination, the plundering of biodiversity, and unknown long-term effects

**Future generations** must bear continued conflict, clean up costs, lasting health effects, and altered landscapes. Their resource base for development is depleted or gone, and no resource revenues have been invested

## SPECIFIC IMPACTS FOR WOMEN

- Women are much more likely than men to gather water and do washing in rivers and streams; they are exposed to toxins in the water
- Mercury poisoning affects pregnant women and fetuses
- Women gathering firewood for cooking have to go farther when mining operations cut down forests
- Women are less likely to get hired in the mines; an influx of men leads to sex industry; since forest and farm livelihoods are lost and mine jobs are not an option, sex work can become the only option for them to earn a living
- Women have very little to no representation in the government; they have less influence in decisions around mining and policies



Photo AOW

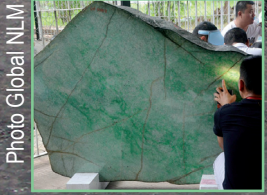
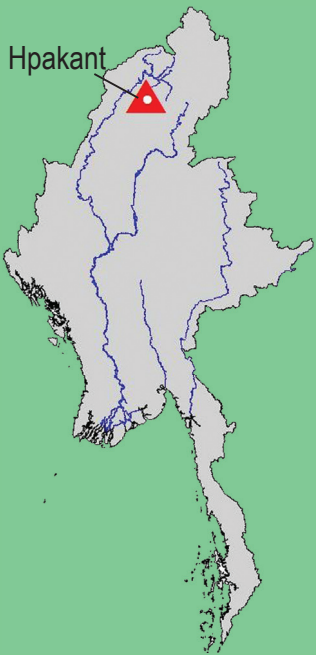


Photo Global NLM

# JADE:

China's jewels,  
our blood

Photo KDNG



Hpakant

Kachin State in northern Myanmar is home to the world's largest and most valuable jade deposits. The large majority of the world's quality jadeite comes from Myanmar and almost all of Myanmar's high quality jade is sold in China and Hong Kong.

The scale of jade excavation significantly increased after a ceasefire was signed between the Kachin Independence Army and the Burma Army in 1994. Consolidation of the industry and massive joint ventures with the military-owned UMEHL

saw an increase in the use of huge modern machines and an influx of men from across the country to work day and night in the mines. Local people were pushed out; drug use and the sex industry flourished. The landscape of Hpakant, the main jade area, has been completely altered and destroyed by the mines. Local rivers routinely break their banks due to soil erosion, flushing toxic wastes through the streets. Reckless and unregulated digging and piling has caused several severe landslides that have killed hundreds of workers.



Photo Wunpawng Amyusha Zinlum

*Dead bodies of miners killed by landslide in Hpakant*

In 2011 the Burma Army broke the long-standing ceasefire with the Kachin Army, resuming the war and driving over 100,000 people to live in Internally Displaced Camps or as refugees in China. Jade excavation has continued unabated, with heavy Burma Army and police presence around the mines.

Until recently, 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.<sup>2</sup>

<sup>2</sup> [www.globalwitness.org/documents/18095/Jade\\_full\\_report\\_online\\_hi\\_res.pdf](http://www.globalwitness.org/documents/18095/Jade_full_report_online_hi_res.pdf)

# OIL AND GAS:

## Global power play that leaves locals in the dark

Myanmar ranks within the top 40 nations globally for its proven natural gas reserves and Arakan State in the west of the country has one of the largest natural gas fields in ASEAN. Despite this wealth of resources, people continue to suffer chronic energy shortages across the country and Arakan is the second poorest state. Following contracts signed under the military junta, 80% of Myanmar's natural gas is exported to fuel the economies of Thailand and China rather than to provide electricity to domestic homes and industry.

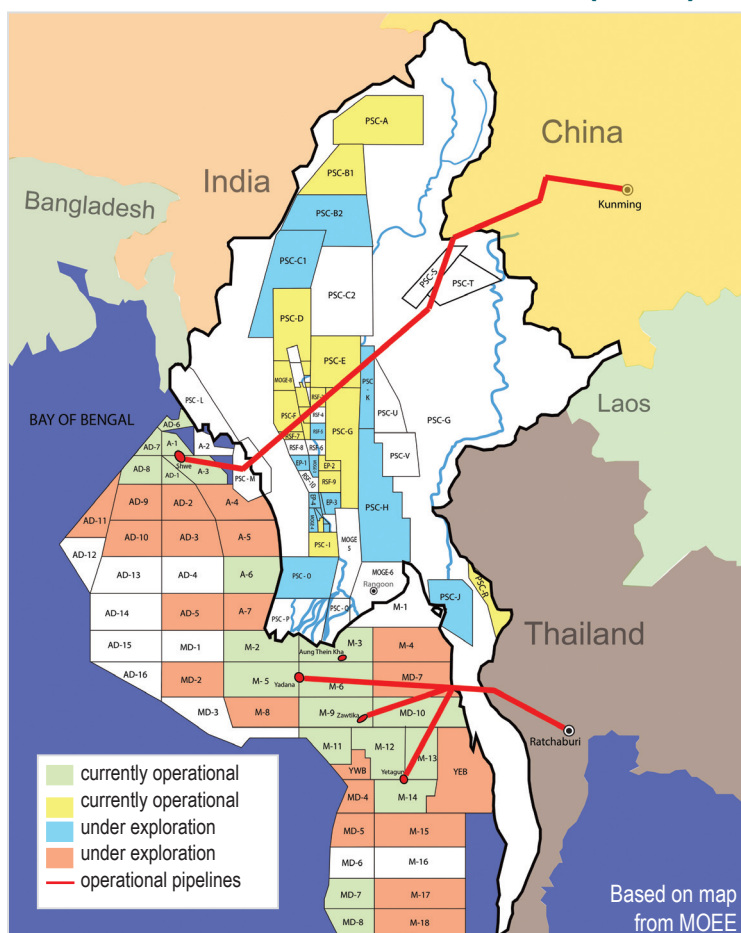
After the 2010 elections and under Myanmar's rebranded government, investments in the oil and natural gas sector rapidly increased. From 2011 to 2015, Myanmar awarded 44 onshore and offshore oil and gas blocks to more than 40 foreign companies for exploration and production. Total Foreign Direct Investment (FDI) in Myanmar during the 2015-2016 fiscal year reached 9.48 billion USD, a 28-fold increase from the year before the

elections. Just over 50% of that FDI was in the oil and gas sector.<sup>3</sup>

Gas exports to Thailand and China provide Burma with one of its largest sources of income, totaling USD 4.2 billion in 2014, or 35% of the country's official exports.<sup>4</sup> Despite the huge sums, Burma's central government has been notoriously opaque about how much it earns from the sale of oil and gas, and what it does with those revenues.

Although oil and gas revenues were included in the national budget for the first time in 2012, the country's revenue management system remains extremely weak and non-transparent with major discrepancies in official data.<sup>5</sup> Unlike other countries with huge oil and gas revenues, Myanmar does not have a dedicated fund to guard against price fluctuations and invest in the future.

## OIL AND GAS CONCESSIONS (2017)



- Total
- Chevron/Unocal
- CNPC, NPCC, Sinopec
- Posco Daewoo
- Oil India Ltd, Reliance Industries Ltd, ONGC
- Videsh, Jubilant, GAIL
- PTTEP, Palang Sophon
- Petronas
- Woodside Energy, Transcontinental Group
- Pacific Hunt Energy
- Petroleum Exploration
- Brunei National Petroleum Co.
- JSOC Bashneft, CIS Nobel Oil Co
- Statoil
- CAOG
- MPRL E&P
- Eni
- Berlanga Holding, Shell
- Petro Vietnam
- BG Exploration and Production, Ophir Energy
- Geopetrol Intl. Holding
- PT Istech, SNOG Pte. Ltd, Goldpetrol

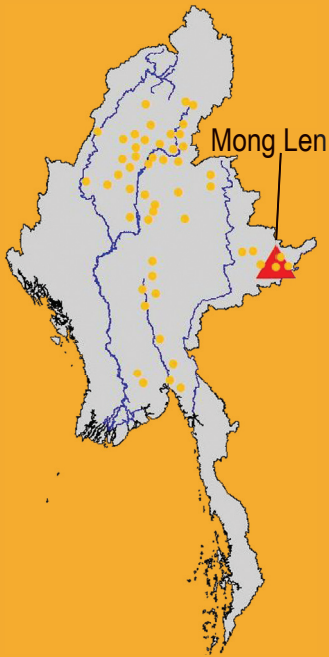
<sup>3</sup> [http://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/2016\\_april\\_fdi\\_by\\_sector\\_yearly\\_approved.pdf](http://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/2016_april_fdi_by_sector_yearly_approved.pdf)

<sup>4</sup> <http://themimu.info/node/41364>

<sup>5</sup> Moore Stephens LLP, Myanmar Extractive Industries Transparency Initiative: Scoping Study for the first EITI report, September 2015

# GOLD:

Enriching the few, poisoning the many



Gold deposits are abundant throughout Myanmar, from Kachin and Shan states in the north to Mandalay and Sagaing regions in central Myanmar and Mon State and Tanintharyi Region in the south. Estimates of Myanmar's gold production is 54,400 Troy Oz or 1,692 kg per year. With current gold prices, the value of gold produced is estimated at 76 million USD.<sup>6</sup>

Domestic and foreign miners build roads into forested areas, and use dynamite and bulldozers to set up ad hoc gold mines, precipitating soil erosion. This is commonly done ahead of proposed dam projects, as miners hope to strike it rich before the reservoir area is flooded.

Although gold mines are currently smaller in scale than jade and coal mines, the process of extracting and separating gold pollutes a tremendous amount of freshwater resources, as unregulated operations use and dump mercury and cyanide at will. A study

investigating human hair from young women from 25 countries found that levels of mercury were among the highest for women in Myanmar.<sup>7</sup>

The gold mine in Mong Len in Shan State is a good example. Water is pumped from a local stream to rinse the gold. The water mixed with toxins and waste is then released back into the stream, which flows down to the agricultural Nam Len valley below. Soil from the mining area also washes down from the mountains into the stream, blocking the flow so that locals can no longer operate small-scale hydropower stations that once electrified their villages. Local women have suffered miscarriages, and babies have been born underweight.<sup>8</sup> Similar to in other mining areas, local people have many times requested various authorities to shut down the mines, but their requests have been ignored by the business sector and the government.

Due to the high value of gold, mines are often secured with armed forces and violence around gold mines is not uncommon. In eastern Shan State, Burma Army troops, shot dead a 54-year-old farmer who had trekked up to the hills with fellow villagers to monitor the expanded mining operations in October 2015. There has been no date set for a court hearing in the case.<sup>9</sup>

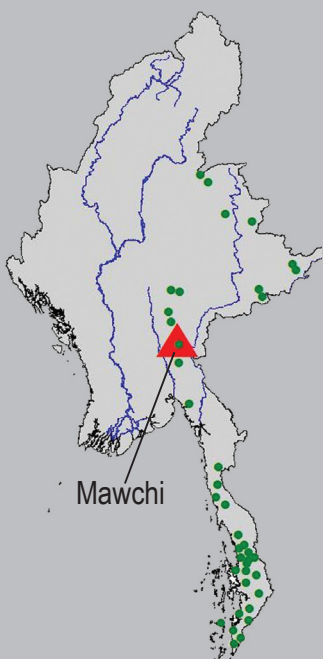
<sup>6</sup> [www.norway.no/en/myanmar/norway-myanmar/news-events/news2/gold-mining/](http://www.norway.no/en/myanmar/norway-myanmar/news-events/news2/gold-mining/)

<sup>7</sup> Ibid.

<sup>8</sup> [www.shanhumanrights.org/eng/images/2015/pdf/02-23-16-english-by-shrf.dfrs](http://www.shanhumanrights.org/eng/images/2015/pdf/02-23-16-english-by-shrf.dfrs) Network

<sup>9</sup> Ibid.

# TIN AND TUNGSTEN:



Widespread use of electronic goods is causing an increased global demand for tin, and Myanmar has some of the highest quality tin in the world. The Mawchi tin and tungsten mines in Kayah State were the main source of tungsten in the world before World War 2. Today the Mawchi mines are still operational, as are tin mines in southern Tanintharyi region. The case of the Mawchi mine is particularly poignant—although it has been operating since 1830, the lives of the local people have barely improved over decades.

## No improvements after nearly 200 years

The people of Kayah State have no way of knowing the income from the mines because even the Kayah State government is not informed. The military-owned UMEHL is heavily involved in tin mining and the main company operating Mawchi is run by a former Burma Army officer who is known for abusing local people. Local tin miners can only profit by smuggling tin on the black market, which is dangerous due to various army and militia checkpoints on local roads.<sup>10</sup> Villagers can only hope to get wage labor jobs and do not dare to complain about the conditions and negative impacts of the mines. Similar to other mining areas, dangerous landslides are frequent, waste from tin mines is polluting water sources and damaging farmlands, and an influx of male migrant workers has led to a burgeoning sex industry.

<sup>10</sup> <http://burmacampaign.org.uk/media/LostParadise-MawchiMining-English-.pdf>



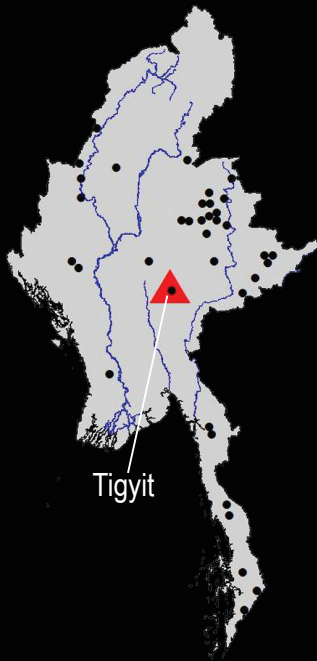
Blasting a river bank for gold



Mines are often secured with armed forces

## COAL:

### A dirty energy choice



According to the Ministry of Mining, Myanmar has over 16 large-scale coal deposits, with total coal resources of over 270 million tons. The Myanmar Energy Master Plan, drafted by the Asian Development Bank, calls for a dramatic increase in the use of coal for electricity production (from 3 to 30 percent in 15 years), but does not significantly discuss renewable energy sources.<sup>8</sup> Currently about 3% of the country's electricity is generated from coal, and much of

that is used to power other mining operations or urban industrial zones, not domestic households. Some of the planned coal fired power plants will have to depend on imports of high quality coal from countries such as Indonesia.

The vast majority of the energy generation proposed in the Energy Master Plan is for export to neighboring countries. Export requires building an expensive large-scale transmission system, which will contribute to the nation's debt and primarily benefit Independent Power Producers (IPPs). The rationale for exporting power is to generate revenues for the central government that can be used for domestic development. According to



The Tigyit coal power plant in Shan State

previous projects, however, such revenues do not reach rural Burma and areas where the resources originate. The Master Plan also prioritizes the development of a national grid, something that will not reach major areas of ethnic states for 30 years.

The country's largest open cast coal mine and largest operating coal-fired power plant are in the village of Tigyit, located within the watershed of Myanmar's famous Inle Lake, a global bio-resource. The plant uses 640,000 tons of coal per year to produce 120 Megawatts. Two nearby villages of Lai Khar and Taung Pola were forced to relocate for the project and over 500 acres of farmlands were confiscated. Now about 50% of the nearby population has skin rashes; respiratory and other disease rates are not being monitored and medical facilities are substandard.<sup>10</sup>

<sup>10</sup> <https://paoyouth.org/wp-content/uploads/2018/03/Poison-Clouds-in-English.pdf>



Photo: Protest against coal mine in Shan State

## NO MORE RESOURCE THEFT

Mining is often touted for its potential to contribute to Myanmar's development. Revenues from the mining industry are supposed to contribute to the country's healthcare, education, transportation, and other infrastructure still desperately lacking in most parts of the country, and to compensate the local communities of the project areas. Yet there is no proper accounting of how much revenue is gained from mining and where it winds up.

The power of the military and the centralized structures of government enshrined in the constitution prevent people from having a say in what do to with their resources, and from receiving revenues or benefits from those resources.

Mining in Myanmar has caused destruction and loss of water sources, forests and farmlands. Mining has caused land grabbing, evictions, and human rights abuses. The toll of respiratory diseases, cancers, and other ailments on today's population and future generations, is incalculable. Businesses and the government use militia and security forces to "secure" mines, intimidating and eliminating local farmers, independent miners, and those who protest or oppose them.

Fighting has intensified between the Myanmar military and ethnic armed groups since 2011. The Myanmar Peace Monitor records shows that there were 557 clashes between April 2016 and April 2018, during the NLD government rule. Despite the government's claims that its "peace process" with ethnic armed groups is achieving progress, the number of Burma Army attacks against those groups has become even more intense, leaving hundreds of thousands of civilians homeless and seeking refuge in IDP camps. Rampant resource extraction by the central government and its military in ethnic areas is fueling the war.

Constitutional reform is urgently needed, to devolve powers - including over natural resources - and to curb the power of the military.

## RECOMMENDATIONS

- A moratorium on all non-artisanal mining projects until a new devolved federal constitution and relevant legislations are adopted in accordance with a future Union Peace Accord.
- New devolved federal and state constitutions, related legislation and policies based on the principles of democracy, self-determination, human rights, and environmental sustainability, must be adopted through representative processes.
- Federal, state and substate laws and democratic institutions must enforce environmental and social safeguards that protect rights and rights defenders and include mechanisms for affected communities to reject natural resource projects; and proceed only with projects that follow safeguards, and receive free, prior, and informed consent inclusive of women's representation at every stage.

### MYANMAR MINING WATCH NETWORK

A coalition of community-based groups from mining areas  
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