

Valley of Darkness

Gold mining and militarization in Burma's Hugawng valley

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All photos in this report are from KDNG unless otherwise noted. The authors request that photos not be copied and distributed without first contacting KDNG.

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Kachin Development Networking Group

KDNG is a network of Kachin civil society groups and development organizations inside Kachin State and overseas that was set up in 2004. KDNG's purpose is to effectively work for sustainable development together with locally-based organizations in Kachin State. Its aim is to promote a civil society based on equality and justice for the local people in the struggle for social and political change in Burma.

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ACTONYMS ASEAN

KDNG	Kachin Development Networking Group
KIA	Kachin Independent Army
KIO	Kachin Independence Organization
NDA-K	New Democratic Army - Kachin
MWAF	Myanmar Women's Affairs Federation
SLORC	State Law and Order Restoration Council
SPDC	State Peace and Development Council
UNODC	United Nations Office on Drugs and Crime
USDA	Union Solidarity and Development Association
UN	United Nations
WCS	Wildlife Conservation Society

Association of South East Asian Nations

Spelling

KDNG has chosen to use the spelling Hugawng as it better reflects the pronunciation of the name in the Kachin language. The valley is also often referred to as Hukawng.

The remote and environmentally rich Hugawng valley in Burma's northern Kachin State has been internationally recognized as one of the world's hotspots of biodiversity. Indeed, the military junta ruling Burma, together with the US-based Wildlife Conservation Society, is establishing the world's largest tiger reserve in the valley. However, the conditions of the people living there have not received attention. This report by local researchers reveals the untold story of how the junta's militarization and self-serving expansion of the gold mining industry have devastated communities and ravaged the valley's forests and waterways.

The Hugawng valley was largely untouched by Burma's military regime until the mid-1990s. After a ceasefire between the Kachin Independence Organisation (KIO) and the junta in 1994, local residents had high hopes that peace would foster economic development and improved living conditions. However, under the junta's increased control, the rich resources of Hugawng valley have turned out to be a curse.

Despite the ceasefire, the junta has expanded its military infrastructure throughout Kachin State, increasing its presence from 26 battalions in 1994 to 41 in 2006. This expansion has been mirrored in Hugawng valley, where the number of military outposts has doubled; in the main town of Danai, public and private buildings have been seized and one third of the surrounding farmland confiscated. Some of the land and buildings were used to house military units, while others were sold to business interests for military profit.

In order to expand and ensure its control over gold mining revenues, the regime offered up 18% of the entire Kachin State for mining concessions in 2002. This transformed gold mining from independent gold panning to a large-scale mechanized industry controlled by the concession holders. In Hugawng valley concessions were sold to 8 selected companies and the number of main gold mining sites increased from 14 in 1994 to 31 sites in 2006. The number of active hydraulic and pit mines had exploded to approximately 100 by the end of 2006.

The regime's Ministry of Mines collects signing fees for the concessions as well as 35% - 50% tax on annual profits. Additional payments are rendered to the military's top commander for the region, various township and local authorities as well as the Minister of Mines personally. The junta has announced occasional bans on gold mining in Kachin State but as this report shows, these bans are temporary and selective, in effect used to maintain the junta's grip on mining revenues.



Executive Summary

While the regime, called the State Peace and Development Council or SPDC, has consolidated political and financial control of the valley, it has not enforced its own existing (and very limited) environmental and health regulations on gold mining operations. This lack of regulation has resulted in deforestation, the destruction of river banks, and altering of river flows. Miners have been severely injured or killed by unsafe working practices and the lack of adequate health services. The environmental and health effects of mercury contamination have yet to be monitored and analyzed.

The most dramatic effects of this gold mining boom, however, have been on the social conditions of the local people. The influx of transient populations, together with harsh working conditions, a lack of education opportunities and poverty have led to the expansion of the drug, sex, and gambling industries in Hugawng valley. In one mining area it was estimated that 80% of inhabitants are addicted to opium and approximately 30% of miners use heroin and methamphetamines. Intravenous drug use and the sex industry have increased the spread of HIV/AIDS. Far from alleviating these social ills, local SPDC authorities collect fees from these illicit industries and even diminish efforts to curb them.

The SPDC continually boasts about how the people of Kachin State are benefiting from its border area development program. The case of Hugawng valley illustrates, however, the fundamental lack of local benefit from or participation in the development process. The SPDC is pursuing its interests of military expansion and revenue generation at the expense of social and environmental sustainability.

This report documents local people speaking out about this destructive and unsustainable development. Such bravery should be encouraged and supported.



Introduction and Methodology

Kachin State is Burma's northernmost state, sharing a border with China and India. The population is estimated at 1-1.5 million; the majority of the people are Kachin. The state is rich in natural resources including timber, minerals and gems. It is one of only two places in the world where imperial jade or jadeite is found.

Gold mining is becoming an issue of debate in Kachin State as it has been expanding rapidly in the mid-1990s. It has resulted in serious social and environmental problems not only for those living in gold mining areas but also the larger Kachin population. Young people from local organizations, concerned about what is happening in their communities, wanted to shed light on the subject, especially what is happening on the ground and its effects on local people. The Kachin Development Networking Group (KDNG) therefore decided to research the recent expansion of gold mining operations in the Hugwang valley as a case study. Hugawng was largely undisturbed by the ruling military regime before 1994, and it therefore provides a good example of the regime's recent development process, in particular the social effects of gold mining.

Due to the non-transparent nature of extractive industries in Burma, it is difficult to access publicly available information about the gold mining industry. Therefore, three researchers from KDNG collected information in Hugawng valley from late 2004 to late 2006. The researchers met and interviewed gold miners, gold mine owners, staff of gold mining companies, hawkers and shopkeepers in gold mining areas, medical doctors, gold mine committee members, local villagers, drug-users, drug dealers, sex workers, owners of massage parlours, USDA authorities, and Kachin Independence

Organization (KIO) officers (for a full list of interviews please see appendix). As the environmental impacts of gold mining have been researched in other reports. KDNG primarily focused its own interviews on the structure of gold mining operations and their social impacts.

Three gold mining areas in the Hugawng valley were specifically studied for this report: Tong mali, Nambyu, and Shingbwi Yang. The KIO maintains a sub-administrative role in the areas of Tong mali and Nambyu while the SPDC fully controls the area of Shingbwi Yang. In some areas, there were no telephones, and no car roads. The researchers had to walk long distances and reports could not be sent promptly. Hugawng valley is an area that the SPDC controls strictly and it is hard to transmit information safely.

The report is also based on official documents and agreements between local authorities and gold mining companies that were obtained by KDNG but cannot be published due to security concerns of those involved. Moreover, KDNG collected information from news agencies, research papers from different organizations, reports, articles, UN statistics, and historical facts to make this report more complete and informative.



The Hugawng valley

Hugawng valley is located in the western part of Kachin State near the Indian border, nestled between the Kumon mountain range to the east and the Patkai mountains to the west. The Patkai form the watershed area for the Chindwin and Brahmaputra rivers while the Kumon contain the headwaters of the tributaries of the Chindwin and Irrawaddy rivers in Kachin State. Mountain streams from the catchment areas flow toward the plains of the Hugawng valley where they combine to become the largest tributary of the Chindwin, the Danai River.

Within Kachin State, Hugawng valley forms the township of Danai which is further divided into 17 village tracts with a total of 60 villages. The official registered population according to the SPDC Danai Township office was 32,981 in 2005. However, due to the influx of migrants into the township it is difficult to determine the actual population. Local estimates range from 70-100,000. During World War II, the Ledo Road used by American alliance troops passed through this valley (see box); there has been little development in the valley since that time beyond the building of military infrastructure by the Burma Army.

Livelihoods

Because of the fertile alluvial soils on the banks of the Danai River and its streamlets, Hugawng valley has vast areas of arable land for different kinds of crops. The local people grow wet paddy in lowland areas, practice rotational agriculture in upland areas, and raise domestic animals. They subsist by hunting, fishing, and collecting fruits and forest products from the jungle. People also mine gold, quartz, platinum, amber, and rubies. Some engage in logging.

Hugwang valley made recent news in the journal Science. A 100 million year old bee – older than any other previously found - was discovered trapped in a piece of amber from a mine in Hugawng. The ancient bee holds keys to explaining the rapid expansion and diversity of flowering plants at that time. This scientific gem is another example of Hugawng's natural richness.

Environment

Kachin State is part of the Indo-Burma region recognized as one of the eight "hottest hotspots for biodiversity" in the world. The hotspots are sites containing the greatest concentration of endemic species that are also experiencing exceptional loss of habitat. Hugawng valley itself is a rainforest habitat and holds one of the biggest tiger populations in Asia (see box). A 1999 Wildlife Conservation Societysponsored expedition there documented 135 bird species and 39 species of orchids in addition to elephants and the rare leaf deer.² Other wildlife in the area includes various hornbills, the rare hoolock gibbon, and clouded leopard. The Chindwin River, the main tributary of the Irrawaddy River, one of Southeast Asia's greatest waterways, runs through the valley.

Peoples and Culture

The majority of the native people in the Hugawng valley are Kachin. The Kachin are a collection of several tribal groups³ known for their fierce independence, disciplined fighting skills, complex clan interrelations, embrace of Christianity, craftsmanship, and herbal healing and jungle survival skills. Other residents in Hugawng valley include the Nagas and Shans as well as the more recent Burman arrivals.⁴

The Kachin are admired for their silver work, especially swords, ornaments and jewellery, and their textile work, particularly their

Brief Political and Historical Background of Kachin State

The British colonized Burma from 1886 until 1939 when Japan invaded the country. Since gaining independence from Britain in 1948, disagreements and broken promises over the relative rights and powers of the central government and the frontier areas have left the country in a state of civil war. After a brief spell of parliamentary government, Burma has been under a series of military dictatorships since 1962.

The Kachin Independence Organization (KIO) and its armed force, the Kachin Independence Army (KIA) was founded in 1961. After years of armed struggle, the KIO/KIA signed a ceasefire agreement with the SPDC in 1994 with the hope that their political issues could be solved by means of negotiations. KIO representatives were initially only allowed to participate as observers in the regime's National Convention, which was ostensibly set up to develop a new constitution for a future democratic Burma in 1993. The Convention, however, has dragged on without completion and in the meantime the SPDC increased their troops in Kachin State from 26 to 41 battalions. In 2004 the KIO was finally invited to be full participants in the Convention but many are sceptical that any meaningful change will come from the process.

While there has been no significant political change since the ceasefire, many Kachin leaders have been persuaded to concentrate on business. The SPDC has used business opportunities to effectively divide the Kachin into many groups.

Hugawng Valley Tiger Reserve

In 2001 the Hugawng Valley Wildlife Sanctuary was established by the SPDC with the support of the US-based Wildlife Conservation Society (WCS). In 2004, the sanctuary was tripled in size and is now the world's biggest tiger reserve. According to a description on WCS's website, the reserve covers the entire Hugawng valley, an area of 21,890 square km, nearly the size of the US state of Vermont. Together with three adjoining

protected areas, it comprises the Northern Forest Complex, an area the size of Belgium with ecosystems ranging from lowland Indo-Malayan jungle to alpine Sino-Himalayan habitat.5 WCS claims that the tiger reserve is now "one of the most important protected landscapes for wildlife in the world" and that "UNESCO officials are strongly urging that this valley be recommended as a World Heritage Site."6

WCS acknowledges that changes in Hugawng valley since 1999, including gold mining, have increased human pressure on the forest. They claim, however, that due to the joint efforts of WCS and the Ministry of Forestry, "gold mining is almost completely shut down in the valley."7 A similar claim was made in a National Geographic article about the champion of the tiger reserve, Alan Rabinowitz of WCS.





Note: The proposed expansion of the sanctuary was approved by the Ministry of Forestry in December 2004. For KDNG's assessment of gold mining in the sanctuary, see page 19.

According to the article, Rabinowitz had "importuned every official he could and now the government had decreed that all gold mines on the wide Ayeyarwady (Irrawaddy) River would be closed by the end of 2005."8 KDNG's research in Hugawng valley has clearly indicated that gold mining is not "completely shut down" but widespread and thriving in partnership with the SPDC's Ministry of Mines. As described later in this report, various SPDC authorities, from battalion leaders to the regional commander, continue to cash in on the industry. With SPDC officials from the top down profiting from gold mining, there is little political will to place serious curbs on the industry.

The Ledo Road

The Ledo Road (also sometimes called the Stilwell or Burma Road) is one of the most significant engineering feats of World War II. Running from the town of Ledo in northeast India to Kunming in southwest China, the 1,770 kilometre road provided a way for the Allies to transport weapons and goods into Japanesebesieged Burma and China. In addition to being among the many different peoples that built the road, Kachin fighters were of crucial assistance to British and American guerrilla units fighting the Japanese Imperial Army. Today in Hugawng valley, the road is an earthen all-season road between Namti and Danai and apart from many dilapidated bridges remains in reasonably good condition until Shingbwi Yang. However, the stretch from Shingbwi Yang to the Indian border runs through undulating terrain and is not passable in the rainy season.10

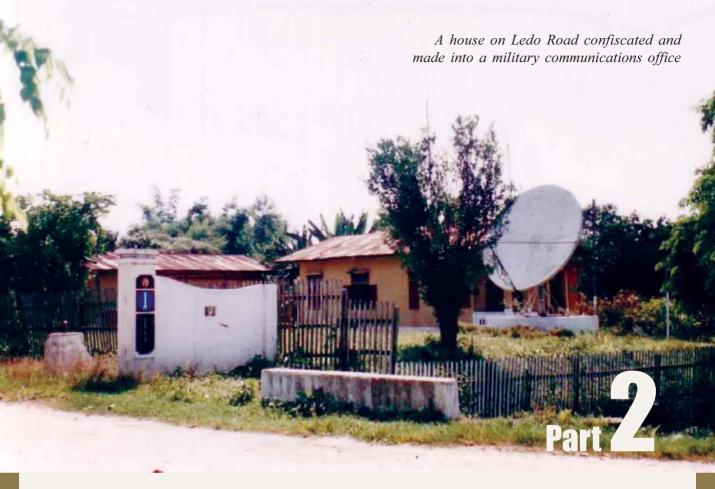
unique designs in shoulder bags, traditional skirts, and jackets. These handmade items are used for dowry or payment for fines. Kachin traditional food and drink include sticky rice (Tsa Pa) and rice beer (*Tsa pyi*) fermented with herbal yeasts. Fish and meat wrapped with leaves are baked in fire, preserved inside bamboo containers, or boiled. The Kachin had been animists for several centuries until many of them became Christians or Buddhist beginning in the late 1800s. Today the majority of Kachins are Christians, while a few remain animists. Conflicts and crimes are solved according to Kachin customary laws.9

Political background

Hugawng valley had been free from outside rule during the past several centuries. Historically, twelve Kachin chiefs (Mung Du) divided the area and ruled their respective parts according to Kachin customary laws and traditions. From 1890 to 1948, the British officially held administrative rule over Hugawng valley as part of the Frontier Areas, not as part of British Burma. Under the British, the Mung Du were granted feudal rulership in their own regions. There were very few battles during the British rule and Japanese invasion period. However, the region became a battlefield during World War II when American alliance troops used the Ledo Road from eastern India to China through the Hugawng valley (see box and refer to map on preceding page).

After gaining independence in cooperation with the Union of Burma in 1948, the Kachin did not receive due equal rights and autonomous rule but were under the administration of the various central governments and military regimes based in Rangoon. Therefore in 1961, the Kachin Independence Organization (KIO) and its armed force, the Kachin Independence Army (KIA), were formed and operated in several Kachin areas in northern Burma, including the Hugawng valley. The Naga also formed armed groups in the Hugawng valley. Battles between the central government's forces and armed groups occurred regularly until a ceasefire was reached in 1994 (see box).

As part of its ceasefire with the state, the KIO was allowed to maintain its military infrastructure and a local administrative role in some pockets of Kachin State, including some areas of the Hugawng valley. However, all land and natural resources are officially owned by the state in Burma. The Ministry of Mines, Forestry, National Planning and Economic Development, and Energy all have different jurisdiction over the management of these resources, and work in conjunction with the regional military commanders.



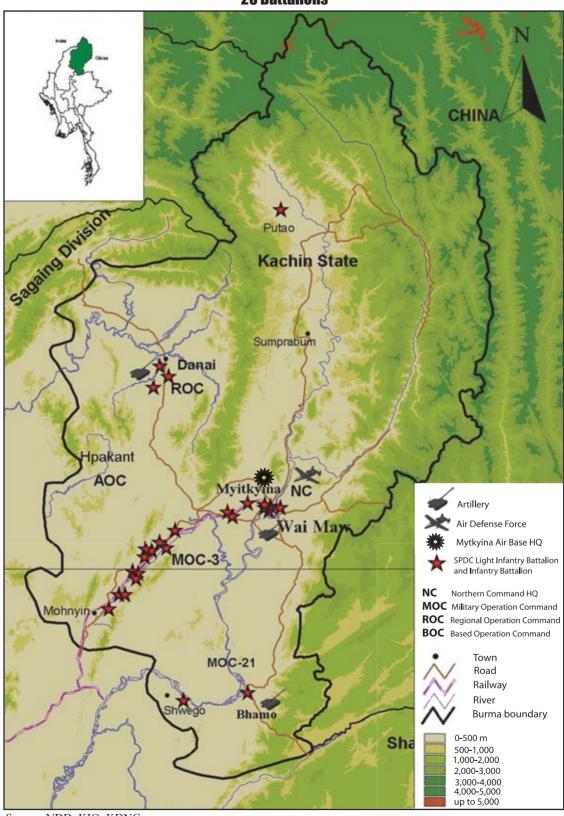
Military control of Hugawng valley

After independence in 1948, the Burma Army sent only mobile patrols to Hugawng valley. In 1970, however, the first light infantry battalion (IB 86) was stationed in Danai. Two additional battalions (IB 238 and LIB 318) were established in Danai by 1992. Troop levels increased further after the ceasefire in 1994. This expansion of military control was mirrored throughout the state. Between 1992 and 2006, Burma Army battalions stationed in Kachin state increased from 26 to 41, and artillery units increased from 3 to 7. In addition, an extensive establishment of military outposts increased the SPDC's reach into hitherto "uncontrolled" areas (see maps on following pages).

The SPDC uses the town of Danai as the centre of its administrative and military activities for Hugawng valley. Even prior to the ceasefire, SPDC troops began confiscating lands in Danai, and this has increased over the years. KDNG was able to document the forcible confiscation of over one hundred acres of lands with houses and 150.5 acres of farm lands from 1991 to 2005 by SPDC battalion officers, including Regional Operations Command authorities. (see appendix for detailed list). These cases are not comprehensive and according to local residents, confiscation is ongoing. Several military camps and offices were built on confiscated lands as well as a police quarters, a fire brigade, a forestry office, a saw mill, a sports ground, and army administration buildings (see photos).

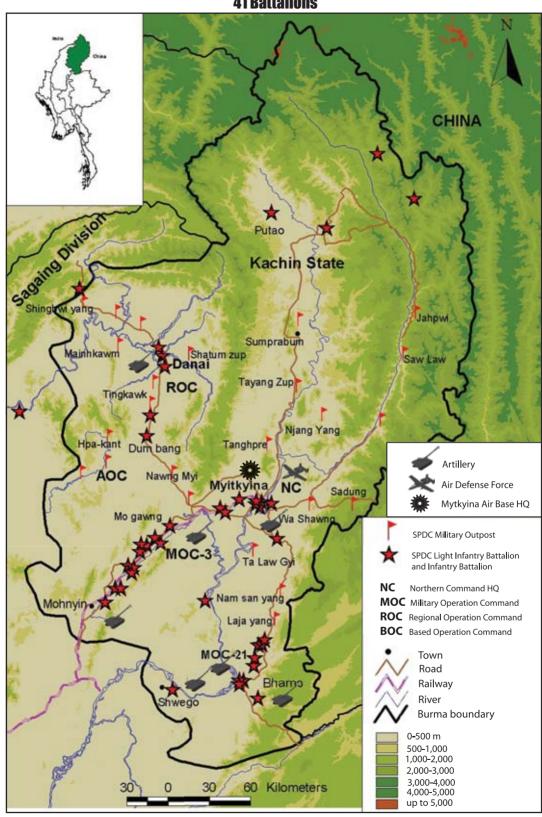
Battalion officers also profited from selling confiscated buildings and houses to non-local business interests. In other words, authorities forcibly seized properties from local residents without providing compensation, and then resold those properties for a profit. According to local residents, SPDC

Burma Army Battalions in Kachin State 1994 26 Battalions



Source: NDD, KIO, KDNG

Burma Army Battalions in Kachin State 2006 41 Battalions



Source: NDD, KIO, KDNG

Burma Army control over Danai

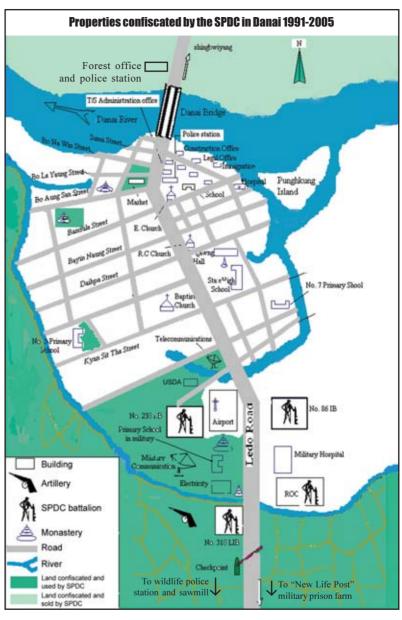












Photos from top to bottom:

Confiscated house now the USDA office in Danai; Forestry office and police station built on confiscated land; "New Life Post" (bawa thit sakhan) - a military farm near the battalion camp outside of Danai established on confiscated lands that imports and uses prison labor;

Gardens on both sides of the Ledo Road that have been confiscated for military farms and livestock department office; A Wildlife Police Station built on confiscated property. A government sawmill is in back of the station.

troops claimed that the orders for eviction came from central headquarters in Rangoon:

"IB 86, 238, and LIB 318 confiscated over 100 acres of housing lands from south of Danai bridge to north of Lamung village in 2003-2004 from local Kachin. Shan, and Indian residents. Some of the land was divided into 60' x 80' plots and then sold to businessmen for 350,000 kvat each." (Interview L23)

A Kachin elder explains how the Burma Army has taken over all aspects of governance in Danai as well as suppressed the use of the Kachin language:

"The SPDC army appoints army veterans for positions in the municipal and local community administration of Danai town...No local Kachin writings can be seen on street signs, sign boards at the bridges, or on public buildings anymore. There are only names and inscriptions by the army officers written in Burmese." (Interview L37)

The military expansion also stimulated further land confiscations by military-related businesses and families. One farmer explained:

"Many relatives of SPDC army officers and retired military men are occupying lands along the lower part of the Danai River. The local people are gradually losing their cultivated farmlands." (Interview L37)

In 2003-4 there were a new series of orders aimed to further clear out local residents along the Ledo Road in Danai. Residents that could not afford to make expensive upgrades to their houses were forced to move and their houses and lands were confiscated by the Land Survey Department:

"By SPDC order, the houses and land plots of poor residents living along the Ledo Road who could not afford to build their houses with iron sheet roofing and wooden floors were confiscated by the Land Survey Department. The displaced moved to hillside rice fields to try to make a living." (Interview L38)

Some of the land that was confiscated was valuable farmland:

"I have grown 106 banana plants, 80 orange trees, 300 lime trees, 300 tea plants, 338 Ding Nyin trees, and other fruit trees in my garden for my children and grandchildren. I intended these trees to produce fruit for a hundred years. This garden is on both sides of the Ledo Road and has now been confiscated as army property." (Interview L34)

Local residents had no choice in the matter and received little or no compensation for their confiscated land. Some families were given lands in other places but those were often marshlands and useless for habitation or cultivation. Landless, people have had to leave for Myitkyina, upland fields, or gold mining areas further outside of town.

Local people suffer not only the loss of land and property but also the slaughter of their animals. A military farm set up on confiscated lands outside of Danai called "New Life Post" uses prison labour from all over Kachin State. If local farmers' animals wander on to this military farm, the prisoners are allowed to kill and eat the animals. The animal owners receive no compensation. "Our cattle and domestic animals have been stolen and slaughtered - we do not know how long it will go on like this," said a local resident (Interview L36).

Who's in Charge?

SPDC military leaders controlling Hugawng valley as of 2006: Northern Regional Commander: Major General Ohn Myint Regional Operations Commander: Colonel Khin Maung Aye Officer in charge of LIB 318: Major Aung Naing Oo Officer in charge of IB 86: Lieutenant Colonel Myo Win Officer in charge of IB 238: Major Zaw Min Thein



Gold mining in Hugawng valley

Gold mining by traditional means has existed in Burma's northern Kachin State for generations. Using manual labour and an array of simple tools including spades, buckets, sieves, plantain bark, swords, iron bars, baskets made with bamboo, and wooden pans, people dug for gold on dry land, on riversides and sand banks, and underwater.

An excerpt from the *Burma Gazetteer* describes how mineral resources were customarily shared among Kachins and their use guided by traditional rituals and ceremonies:

When it ["stone" or jade] is discovered, favourable omens are anxiously awaited before the discovery is announced to the Kachin community. A meeting is then convened by the chief and again sacrifice and other methods of divination are resorted to in order to ascertain if the mine should be worked at once or be allowed to remain undisturbed for a period of years....If indications are favourable...the land is marked out by ropes into small plots a few feet square, which are then appropriated among all the Kachins present. No Kachin belonging to the same family is refused a share, no matter how far away he may live.

Other than mining done by the Burma Gold Dredging Co. in the early 20th century in the upper reaches of the Irrawaddy River in Myitkyina district, gold mining was a small-scale local activity done by Kachin villagers. After 1980, gold mining was done by small machinery in some parts of Kachin State, but it was not until the mid-1990s that it began to take place on a larger scale with imported machinery. ¹² Prior to the 1994 ceasefire between the Kachin Independence Organization

(KIO) and Burma's military regime at the time, the State Law and Order Restoration Council (SLORC), areas with large concentrations of gold were banned by the KIO from being mined and there was little rampant exploitation of natural resources.

Extensive gold mining after 1994

After the ceasefire agreement, private companies backed by Chinese and local investors, and in some cases a front for high-ranking military officers, purchased gold mining concessions in Kachin State from the SPDC's Ministry of Mines. Machinery such as diesel-operated pumps and various dredges from China were imported, and gold mining changed from a small-scale local livelihood to a business venture. Companies and traders worked together to sell the majority of the gold in China and within the domestic Burmese market.

The regime instituted the first of three rounds of bids for mining exploration and prospecting concessions in November 1994 after enacting the Myanmar Mining Law.¹³ Then in October 2002 the Ministry of Mines expanded its bidding process, taking bids on forty-two blocks of land across Burma it had previously identified as likely to contain gold. Twenty-three blocks were located in Kachin State;¹⁴ they cover a total area of 16,083 sq. km or 18% of the whole state.¹⁵

One of the first areas to feel the impact of these changes was the infamous jade and gold mining area of Hpakant which mushroomed to include more than 500,000 people living there by 2001. Gold mining in the N'Mai and Irrawaddy rivers and adjacent areas also intensified, as did mining along the Mali Hka River that boomed in 1999. As gold in these areas becomes increasingly difficult to mine, new areas, including the remote Hugawng valley in Kachin's northwest corner, have begun to feel the impact of the mining industry.

Large-scale gold mining activities along the Chindwin River and in the Hugawng valley developed comparatively later (around 2002) than in eastern Kachin State, as the valley is not easily accessible. According to KDNG research, there are currently 31 main gold mining areas in the Hugawng valley and nearly 100 active pit mines. This is a significant expansion of the industry since the ceasefire in 1994 (see maps on pages 18-19 and appendix 1).



Traditional methods of gold mining



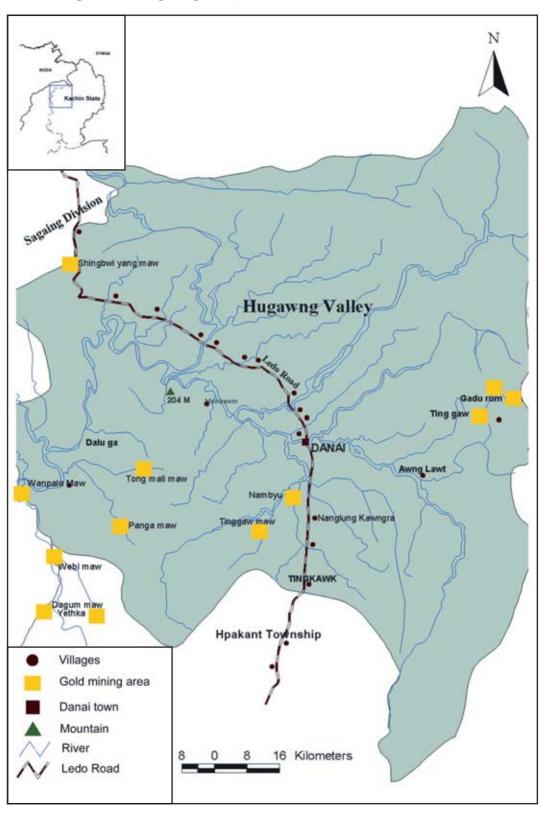


Workers pour earth through sieves in the Shingbwi Yang area after the land has been blasted away by hoses in the background

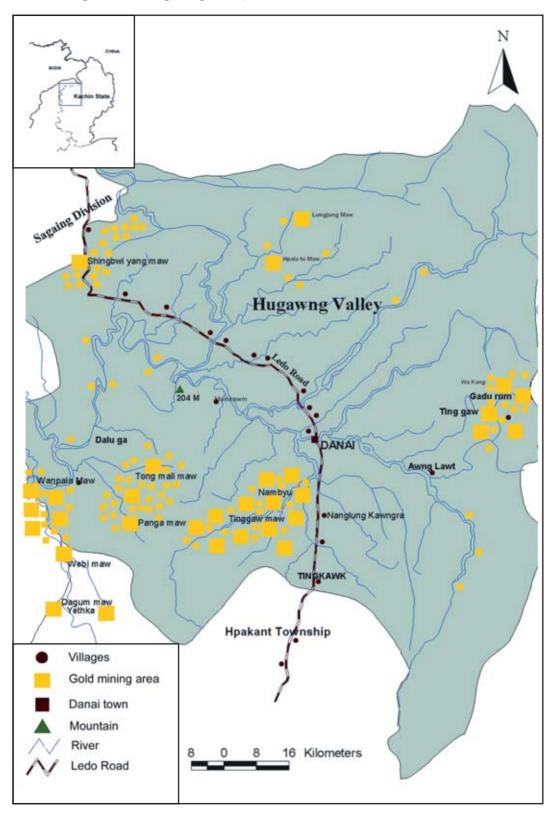


Diesel-powered pumps provide water to blast river banks for hydraulic mining

Gold Mining Areas in Hugawng Valley 1994



Gold Mining Areas in Hugawng Valley 2006





A miner pans for gold in the Nambyu area; using mercury to amalgamate the gold



Pulling buckets of earth out of a pit mine; earth from the pit mine is piled up and will be put through a sieve to separate out gold





4 x 4 pits from a distance; view from the top of a 4 x 4 pit in the Nambyu area



Types of Gold Mining in Hugawng Valley

Enormous amounts of soil, sand, and rock are disturbed in order to obtain small amounts of gold. Earth is collected and sifted, and the sand is then usually mixed with chemical reagents to extract the gold. Mercury is the most common reagent used. As gold is still relatively easy to find in Hugawng valley, cyanide, which can separate gold more easily, is not yet widely used.

(1) Gold digging and panning by manual labour

These types of gold mining are done on a small scale with rudimentary tools and normally few or no chemicals. On dry land, gold is dug along deposit lines or along riverside banks where gold dust is deposited by floods. Underwater mining involves collecting earth from the river bed, running it through a basic sieve, and panning it by hand. The dense gold dust and nuggets come to rest at the bottom of the pan as the movement separates them from the other sands and pebbles. Local people have been using these methods of gold mining for generations and they are the least harmful to the natural surroundings. Today just roughly 5% of gold mining is still done this way in the Hugawng valley.

(2) 4' x 4' pit mining

This mining method is fairly popular in Hugawng valley; roughly 20% of mines are 4 x 4 pit mines. First, miners dig an opening in the ground 4 feet x 4 feet wide and 10-15 feet deep and then dig horizontally out from the bottom of the pit. The tunnel may get longer than 20 feet and may link up to other tunnels underground. Wooden beams and poles are used as supporting posts to prevent collapses and mudslides in the tunnel. In order to ventilate the bottom of the pit, a long iron pipe is hung vertically with a burning oil-soaked rag on its top. A co-worker above ground pulls up baskets or buckets full of earth by a rope fixed to a pulley. The earth is then piled at a prepared location and poured through a sieve on a slanted frame, the gold is panned out and separated using mercury.

This method uses very low-tech machinery and causes little chemical waste but it is a very dangerous and risky way of gold mining. The earth can collapse and bury miners underneath, and miners suffer from jaundice and swollen limbs due to long hours of work in the dark pits. Abandoned underground tunnels that have sunk or collapsed have trapped elephants and other animals. After the area is mined out, discarded toxic tailings make it difficult for plant life to regenerate.

The majority of these pits are operated by independent miners who pay the concession holder. Usually three men will join together in one pit and share the post-tax profits. The miners usually rent a machine only for the sieving part of the process.

(3) Gold mining on land by machine or hydraulic mining (see photos on next page)

This is the most common form of gold mining in the Hugawng valley; approximately 70% of mining is done this way. Chinese-made 25 horsepower pumps with pipes attached to them are used for this type of mining, usually in areas where concentrated amounts of gold have been discovered. A "one set machine mine" has at least one pump and one suction dredge. The number of sets increases depending on the size of the gold mine. A typical mine is 10 x 10 feet and employs at least three miners, depending on the number of machines in operation. Some mines have more than 10 employees.



Water blasting to clear land for gold mining area in Tong mali; hydraulic mining in Nambyu



A dredge used in hydraulic mining in Nambyu; a diver readies himself on the Mali Hka



Buckets on a dredge in action; view of the whole dredge





On dry land and slopes along the river banks or streams, the earth is first blasted with water or "drenched." Promising sites are selected and the land is cleared for test mining. Once gold is found, rocks and wood that cannot be sucked out by the machines are removed by manual labour. Water is transported by pump and the walls of the mine are hosed down. Earth is collected by a suction dredge and sieved through fine plastic netting. Gold is then panned out and separated using mercury.

This type of gold mining has higher health risks due to the larger amounts of mercury tailings it produces. Mudslides from collapsed walls of the mine may also injure miners. When done near rivers, river banks collapse and river courses change.

(4) Gold mining under water (suction dredging)

Underwater gold mining is very common in the Mali Hka area of Kachin State but is very rare in Hugawng. It uses the same machines as above, functioning on bamboo rafts. A suction dredge (basically an underwater vacuum) is directed by divers along the bottom of the river beds. The earth is sucked up and must be sieved before the gold is panned out and separated using mercury.

Divers work with the most basic diving equipment (a mask and simple hose for breathing). They usually stay under water for 2-3 hours at a time rotating with team members; they may dive 2-4 times per day.

Rocks that are dislodged in the process may injure a diver; divers may also be sucked down by strong currents. It is extremely dangerous for divers and drowning is not uncommon. Team members waiting above may not know the diver's fate until the allotted time is up and the diver does not return. This type of mining is also hazardous to rivers' ecosystems. River beds are destroyed, mercury pollutes the water, and creatures may also be disturbed or killed by the changing nature of the river.

(5) Gold mining by bucket dredges

This type of gold mining is just now being introduced in Hugawng; less than 5% of mining is currently done this way. Machinery rafts that use two engine heads and iron buckets which rotate on a chain are used. Earth is cupped up in the buckets and poured through a sieve. Large pebbles and stones are removed by the machine. Gold dust is panned out and collected by the use of mercury.

This method of gold mining ruins the riverbeds and causes river banks to collapse. It can dig out a large amount of earth quickly and it depletes the gold resource very fast. The machine rafts are tied firmly with ropes attached to big trees or rocks on the river banks. This is dangerous to small boats and passenger ferry boats which travel along the rivers. Water creatures and human beings are endangered due to mercury contamination.

The use of mercury in gold mining

Mercury is commonly used as a reagent to extract gold in Kachin State. Miners often squeeze a gold/ mercury mixture inside a cloth by hand, burn off any remaining mercury, and collect the solid gold that remains. During this process, some mercury flows into the rivers, some is collected for reuse, and the rest is released into the air and wider environment as gas. Tailings - the leftover crushed rock material and chemical reagents like mercury mixed together - are often dumped into rivers or left at mine sites.

This section also draws upon the report At what price? Images Asia and Pan Kachin Development Society, November 2004.

"The local people find it more difficult to earn a living now. Gold mining companies monopolize the business by paying the government for licenses and we local residents are at our wits' end. The gold mining areas formerly used by us are now under their control." (Interview G16)

How the gold mining business works

All mining in Kachin State can be done only under the approval of the SPDC. Large gold mining companies pay for concessions from the Ministry of Mines¹⁶ to mine for gold in a given area for a given amount of time and are responsible for collecting revenues which are paid to the Ministry and the Northern Regional Commander.¹⁷ Very little is known about the hundreds of official and unofficial concessions granted by the Ministry to local and Chinese companies.¹⁸ It is also unclear how many companies are in fact owned by members of the regime.¹⁹ In implementing this concession system, the regime has solidified its place at the top of the gold mining industry "pyramid" (see diagram of this in Hugwang on page 26), expanded its reach into the most lucrative business in the valley and therefore its entire economy, and streamlined its revenue collection all at the same time.

A company called Sea Sun Star holds the concession in all gold mining areas between Danai town and downstream of Danai River in the Hugawng valley. No individual or company can mine for gold in these areas unless they pay taxes to the concession holder in cash or in gold. Sea Sun Star in turn must pay a percentage of its annual profits as a tax to the SPDC (this is in addition to the purchase of the concession). Information that KDNG has collected suggests that this percentage is anywhere from 35-50%, which would be consistent with the tax rates of other resource extraction operations in the country. The company must also pay protection money periodically. One company staff member noted: "Our company takes care of travel expenses, food, and accommodation on special occasions when ministry officials, the Northern Commander, or other authorities visit. Only then can the business run smoothly." (Interview B4)

Other companies in the valley include the Yadana Hein, Buga, and Northern Star companies in Shingbwi Yang (see appendix for a detailed list). The regime sells concessions, collects annual taxes, and extorts additional fees from companies, thus ensuring it benefits handsomely from the industry. Miscellaneous fees include transportation and food as mentioned above, tolls for bridge access to mining areas or fees for SPDC surveyors, as collected in Shingbwi Yang.²¹

The impact of the concession system on the local community has been to turn traditionally independent miners into labourers for companies and subcontracting "gold mine owners" and to precipitate an influx of migrants looking for jobs.

In areas of the valley where the KIO maintains a local-level administrative role, the concession holder must enter into a post-tax profit sharing agreement with the KIO. KDNG was able to determine that in the case of Sea Sun Star, the company shares 45% of its

profits with the KIO. In these areas, the KIO also sits on an administrative committee together with representatives of the company. This committee deals with sub-contractors and other issues of administration.

The SPDC also sells licenses to companies for the sale of important commodities in gold mining areas and collects taxes on these businesses. The KIO may also collect taxes on these businesses:

In the past everyone did gold mining freely...Now, we have to get permission for gold mining from the company. In addition to the gold mines, Sea Sun Star Company has also drawn a business contract from the SPDC for the control of the sale of diesel, gasoline, and meat. Local people have to purchase these commodities from the company and company only. In the past, fishing could be done along the Danai River. Now everything is done by an auction [license] system. Only those who are friendly or related with the company owners can do business. Outsiders are controlling the trade. We have to buy things and food at high prices. We've been staying here to protect our land but it's very hard. (Interview B3)

No sign of gold mining "bans" in Hugawng valley

In recent years rumours of gold mining bans. They are usually not mentioned in state-run media and they seem to be loosely enforced and temporary in nature. Most recently, it was rumoured that a ban was to be put in place by the newly appointed Northern Commander Major General Ohn Myint in late 2005.²² The ban did not take hold in any gold mining areas in Hugawng valley, however. Miners and local residents mention that they heard about a ban in February 2006, but that it seemed to only slow business for a few months. A young miner in Nambyu explained that "in words gold mining is banned but in practice it continues." (Interview B3) One miner in Shingbwi Yang said of the ban: "we did not hear any news like that" (Interview B7) and a clerk from the Sea Sun Star Company said bluntly: "the ban is practiced only in the area surrounding Myitkyina."

The same clerk, however, confirmed that the Northern Commander can call for bans whenever he wants to: "If the SPDC really wants to ban gold mining, they can just do it. After Major General Ohn Myint issued the order to ban gold mining, there was some interruption in the mining for about 2-3 months." (Interview B4) According to a researcher based in Rangoon, "General Ohn Myint suspended mining in order to show his power over lower commanders involved in gold mining. This consolidates financial control and ensures that revenues are directed through him."23





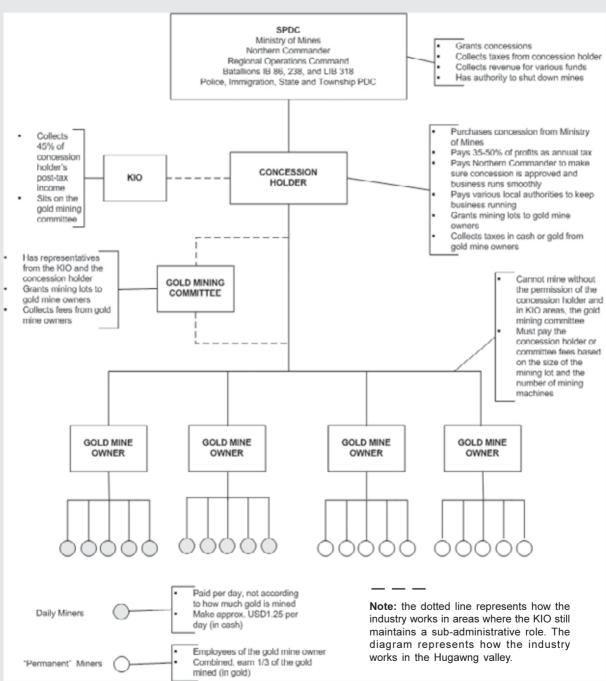
A dredge at work on the Mali Hka (above) and a hydraulic operation in Shingbwi Yang (below) during a gold mining "ban." These photos were taken in March 2006 after a supposed ban had been announced in late 2005.

The Industry





Minster of Mines Brig-General Ohn Myint Northern Regional Commander Major-General Ohn Myint



The actors

The SPDC

The Ministry of Mines grants concessions for blocks of land to companies. They also collect an annual tax of between 35-50% of the concession holder's profits. According to interviews conducted by KDNG, the Northern Commander also collects fees from the concession holder. Several related local SPDC actors, including battalion commanders, the police, immigration, and state and township Peace and Development Council authorities collect "revenue" for various funds from gold mining operators. These actors have the ability to halt or inhibit gold mining operations if they are not satisfied with revenue collection activities.

The Concession Holder

The concession holder, a company, purchases a concession to mine gold from the Ministry of Mines. The company grants mining lots to sub-contractors or "gold mine owners" and then collects taxes in gold or in cash from these owners. It then pays 35-50% of its profits to the Ministry as an annual tax. It also pays the Northern Commander to make sure its concession bid is approved and that business runs smoothly. It has been reported but KDNG could not confirm that although fronted by local actors, either high-ranking SPDC officials or Chinese business interests often own gold mining companies. For a full list of companies operating in the Hugawng valley please see Appendix 1.

The KIO

In areas where the KIO maintains a local administrative role, companies often enter into a separate profit-sharing contract with the KIO. In the case of Hugawng valley, Sea Sun Star is the concession holder in KIO areas and pays the KIO 45% of its post-tax income. The KIO sits on a gold mining administration committee that grants mining lots to and collects fees from sub-contractors or gold mine "owners."

Gold Mining Administration Committee

In KIO areas, a committee with representatives of the concession holder and the KIO is the body that grants mining lots to gold mine owners and collects taxes from them. In these areas, it is still the company, as the official concession holder, that deals with the SPDC and nothing can move forward in business without the permission and satisfaction of SPDC authorities.

Gold Mine Owners

These actors cannot mine without paying the concession holder or the gold mining committee. They must pay set fees depending on the amount of land they will mine (the size of their lot) and how many machines they use. Gold mine owners and large-scale gold dealers (gold collectors) go to Myitkyina to sell gold and bring commodities back to the gold mine areas.

Gold Miners

"Permanent" workers are employees of the gold mine owners. Together, they share 1/3 of the total gold mined in the owner's lot. The other 2/3 is kept by the gold mine owner. Many permanent workers try to steal more gold from the owner; because of this conditions are quite strict and the miners are watched closely. Permanent workers sell their gold earnings to collectors and gold shop owners, usually in the gold mine area.

"Independent" workers are paid by the day and not according to how much gold is mined. They make approximately USD1.25 per day and are paid in cash.

A Kachin businessman familiar with gold mining operations concurred:

"Every time a new Northern Commander comes, logging, gold mining, and border trade are banned for a month or two. It's always been like that. Arrests and bans happen when the Commander's wants are not yet fulfilled. We villagers have to take responsibility for every branch of the SPDC regime, such as paying for their travel expenses, meetings, and employee transfers, or we pay the consequences." (Interview B8)

It appears that when "bans" are imposed, companies with the proper connections to either local authorities or the Northern Commander himself are allowed to continue business while small-scale miners lose out. One miner from Danai explained: "When gold mining is banned, business companies and local authorities still do business. The ban is only for us manual gold miners who have no financial capital." (Interview B6) The end result of the gold mining bans, then, appears to be the consolidation of the gold mining business. By being able to shut down business with a "ban," the Northern Commander can maintain loyalty and income flows from the industry. It is also likely that temporary and selective bans are an attempt by the central SPDC authorities to ensure that mining revenues are going through the Ministry of Mines and not skimmed off by local SPDC actors engaged in cross-border trade with Chinese businessmen.²⁴

Gold mining: a lucrative business for the SPDC elite

"First of all, to set up a company you need to sign in front of a lawyer. Then you need to make it clear that it is for mining. Now, you can apply for a concession lot. First, you are supposed to submit for a mining area where no one has extracted before. Then you must pay at least 10 million kyat to the mining department. But that money doesn't go through official channels. You pay that as a present to the Mining Minister through his personal assistant.

Although you have paid a huge amount of money to the minister, you still have to pay between 50 and 70 million kyat to the Northern Commander (Major General Ohn Myint – not the same person as the mining minister) through his personal assistant to make sure that your work runs smoothly and efficiently. In addition, the company must also pay between 300 and 500 million kyat to the Northern Commander for the Kachin State SPDC fund. Ever since the owner of Sea Sun Star has given "presents" to the minister, he has gotten lots of lucrative concessions. However, if you happen to bribe the wrong person, no matter how much you pay, you will not get any permit. So be careful!

In the past, you just had to pay Secretary 1 of Kachin State SPDC, named Major Maung Myo, to make sure that your submission for a concession was approved. But now, unless it's approved by the Commander, you can't get a concession. Now the Northern Commander is in full control of all matters concerning the allotment of gold mining concessions." ²⁵ (Interview G26).



Environmental and Health Impacts of Gold Mining

The majority of mining operations in Hugawng valley are done on land by machine (see mining type #3 on page 21). The resulting pits from these operations are mined out and then abandoned, leaving behind toxic "tailings" or waste that seeps into the soil and runs off into rivers. In addition to the health dangers posed by working with mercury, the pits may collapse on miners. Accident victims may have to travel up to 16 hours by boat to reach the nearest public hospital for treatment.

The SPDC has granted businessmen permission to exploit gold resources without restriction and without enforcement of its own limited mining rules and laws. The 1994 Myanmar Mining Law and the 1995 Myanmar Mining Rules have not been updated to include the regulation of pollution releases (such as mercury) and do not stipulate any prosecution or fines for mining companies. The Mining Law does mention the duty of mining ventures to "arrange backfill, re-vegetate or reclaim the land in the areas already mined out to the satisfaction of the Ministry." However, these loosely defined laws do not have enforcement or grievance mechanisms. In addition, Burma currently has no formal requirements for Environmental Impact Assessments so that there is no mechanism to assess the potential environmental damage of a mining operation.²⁶

The lack of EIAs, weak mining laws, and next to no enforcement have caused environmental damage throughout Kachin State, including in biodiverse areas (see box Plundering another sanctuary). Land, including forests, is indiscriminately cleared for hydraulic and pit mining operations. Pit mining guts the remaining soil, leaving it pock-marked with series of tunnels up to 20 feet long and 10 feet deep, while hydraulic mining blasts away soil causing erosion on river banks. Wastes from the mining process, including mercury contaminated rocks and soil, are left discarded throughout the

"We villagers felt warm at heart whenever we heard a gibbon singing in the jungle. But we can no longer hear their songs." (Interview G16)



Environmental destruction in the Tong mali gold mining area in Hugawng valley

The destroyed land after gold mining operations in Tong mali



Polluted water and altered stream flow in Nambyu gold mining area



other-worldly landscape. Grazing grounds and habitats for animals are destroyed as well as any plant life that could once grow in the areas. One indicator that habitats have been impacted by mining is the near disappearance of once-common gibbons which are rarely seen in Hugawng valley today.

There are no available records of land rehabilitation cases in Burma although the Mining Law stipulates that it should be done. Photographs have documented the devastation to Kachin and other ethnic lands in Burma with no evidence of an attempt at remediation.²⁷ As lands are laid to waste, medicinal herbs are disappearing.

Gold mining also causes irreversible damage to river systems. River courses have changed and there are fewer permanent breeding habitats for fish and water creatures like frogs, turtles, oysters, and molluscs. These are disappearing due to the gradual decrease of healthy habitats. The Pan Kachin Development Society explains:

Gold mining brings about a complete structural change to affected rivers. Dredging operations clearly cause silting and create waste rock piles in the river. The pits and shafts of land-based gold mining also cause erosion and again silting as the soil runs into streams and rivers. Structural changes like displacement of river beds, changes in the seasonal variance of water levels, shift in sedimentation areas and increased riverbank erosion have been described by many interviewees. Techniques like sluicing and hydraulic mining take up large amounts of water that has to be diverted from rivers. All these interferences in the natural river system have reportedly increased the danger of flooding.²⁸

One example of recent unusual flooding was reported in Kachin:

At 2:00 a.m. on August 11, 2004, Kap dup stream flooded suddenly. Kap dup yields the most gold in the area. Gold mining machines are kept on the banks of the stream and watchmen are employed to look after the machines. On that fateful night, the sudden flood swept away ten watchmen and all the machinery. Only four bodies were recovered.29

The influx of people into the remote area is also putting a strain on the environment. More people are harvesting forest products and fishing. Most people now use plastic bags and containers to pack food and miscellaneous items. People toss plastic waste and packaging anywhere and everywhere, including in the waterways. The plastics under the soil are polluting river bank gardens.

"Before, people only did gold mining on a small scale. No strange diseases were found. Herbal medicines could he obtained easily for prevention and treatment. But it is not easy to find herbs and roots anymore." (Interview G16)

"The losing part is that we who protected the land during many troubles in the past have gained nothing. Our lands are ruined; the plants and vegetation are gone. We lost fishing spots. Streams and lakes are destroyed. We cannot fish; we cannot sell the chickens and pigs that we raised." (Interview B5)

Box: Plundering another sanctuary

In addition to Hugawng valley, the SPDC has also granted concessions in the area of Kachin State's Indawgyi Lake south of Hugawng valley. Indawgyi is an ASEAN heritage site and one of Southeast Asia's oldest lakes. A recent article about the area explains: "The military junta has condoned logging of the forested lakeside hills that are part of the 300-square-mile sanctuary, permitted an expansion of mining for gold, and auctioned off sections of the lake to large companies who fish indiscriminately with impunity" says a recent article about the lake.³⁰

The article continues:

Probably the worst examples of this are the gold mining concessions handed out by the authorities. Kachin State is noted for its gold but environmentalists say an increase in the number of mines close to the lake is causing contamination....

"Northern Star and Sea Sun Star are the largest of around ten companies operating in Kachin State....They have large concessions in the Indawgyi area, where permits are given for one to three years, allowing a company to mine or sell mining rights to an area of land or stretch of the Indaw creek which flows into the Indawgyi Lake."

Burma is a signatory to the UN's Convention on Biological Diversity, supported by more than 150 countries as a commitment to promoting sustainable development.

The UN citation reads: "The Convention recognizes that biological diversity is about more than plants, animals and micro-organisms and their ecosystems-it is about people and our need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live."

In May last year Burma also ratified the supplementary UN protocol on biosafety, which seeks "the prevention of large-scale loss of biological integrity, focusing both on ecology and human health."

Such terms might not mean much to the lakeside villagers, but they are the very people the convention is intended to protect. "It has been years since I last ate Lapi," lamented Hkawn Bu, referring to an indigenous Indawgyi fish that was once an appetizing staple for the villagers around the lake. The fish has not been seen for several years.

Health impacts of gold mining

Mining accidents

Gold mining is dangerous work. A doctor in Tong mali reported that he has seen miners with broken and smashed bones and head injures due to accidents, mainly caused by mudslides. Deaths also occur when pits collapse.

On March 3, 2005, a 25 year-old Shan man working the night shift was changing the nozzle head of a pipe in a pit when a mudslide buried him up to two feet above his head. He recalls:

"The sand entered both of my eyes. I felt pain as if the nerves in my eyes were sprained. I could not walk. It was impossible to receive medical treatment at the gold mining area. I will go to Myitkyina and treat my wounds." (Interview G9)

Miners working underwater have also drowned from being dragged down by strong currents or knocked out by large rocks broken free in the suction process.

Effects of contamination and the spread of diseases Rivers and streams turn dull green, yellowish red, or putrid because of water pollution caused by chemical wastes and fuel oil. Gold miners not only work in the contaminated water but also drink it. People wash their clothes and bathe in the dirty and harmful water while small children play in the streams.

Vegetables like amaranth and pennywort are grown among the discarded rocks and in dirty ponds in gold mine areas. Cabbage, carrots, pumpkins, cucumbers, mustard, eggplant, tomatoes, chili, succulent tubers, yams, and many different kinds of vegetables grow in contaminated areas and are sold to consumers. Workers eat fish. molluscs, and other water creatures that are collected for sale and consumption. Wild animals and fowl in these areas also drink from polluted water sources; they are hunted and consumed. Mercury is a bio-accumulative toxin, so those consuming fish or animals containing mercury are exponentially poisoned.

In addition to mercury, cyanide, 31 which is more toxic, is also used in gold mining operations in Kachin State. Although its use is quite limited in the Hugawng valley to date, cyanide may be more widely employed in the future to extract harder to reach deposits.

Working conditions and primitive living conditions in gold mining areas also contribute to the spread of disease. Common diseases include

"On June 8, 2005, two gold miners were buried alive under a mudslide when they were hosing down the mining pit. Rocks hit them on the back of their heads and they were buried. One had a piece of rock stuck in his head. All their limbs were crushed." (Interview G6)



Women and children bathing and washing clothes in the Tong mali stream



River bank garden along the Tong mali River. There are many gold mines above this spot.



Fish from the rivers near gold mining areas are likely to be contaminated with mercury; these fishermen are going to sell their catch in Tong mali

malaria, typhoid, and gastric illnesses. These are caused by a lack of mosquito nets, pools of stagnant water created in the mining process, irregular eating caused by working long hours and night shifts, and drinking contaminated water.

Business companies and the authorities do not impose safeguards that would prevent contamination. Public medical doctors and SPDC authorities have not conducted public health outreach and education campaigns aimed at caution and prevention.

Inadequate health services

The lack of public health education is coupled with inadequate health services in gold mining areas. Many gold miners have died unnecessarily due to poor medical treatment in cases of accidents and injuries and a lack of sufficient medicines at private dispensaries. In the case of death, some goldmine employers pay a small amount of compensation money to the victim's family, but often no compensation is paid at all. In the case of injuries, some employers provide proper medical treatment, but others do not.

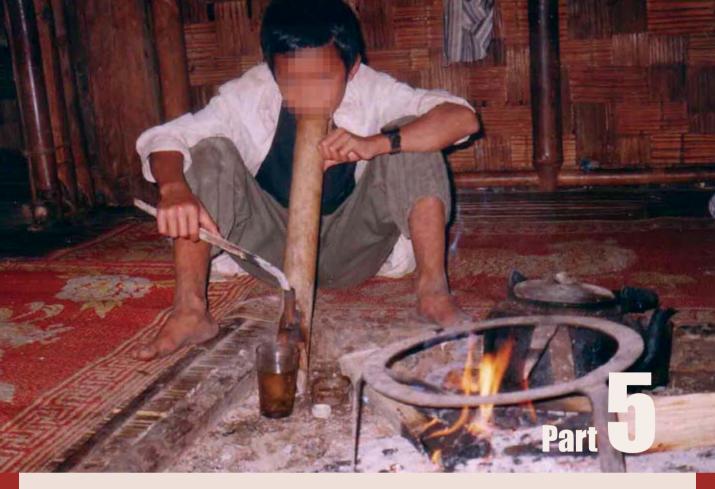
As a case study, KDNG found five private doctors operating in the Tong mali gold mining area; local people there complain that the doctors are not qualified and are expensive. The doctors' credentials are not publicly displayed and remain questionable. There are several medicine dispensaries but no public services, i.e. clinics or hospitals. There is one public hospital in Danai but it takes 16 hours by boat to reach Danai from Tong mali; it is impossible to go by car.³² The hospital in Danai is run by the SPDC and its services are limited. Those who are injured or seriously sick must travel to the civil hospital in Myitkyina for medical treatment because they cannot get proper care at Danai public hospital. Myitkyina is nearly six hours from Danai; anyone that needs to go there has to have enough money to hire a private car.

Despite substantial new incomes from gold mining in Hugwang valley, local and township SPDC authorities have only expanded military control of the area without providing adequate funds for improved health care or improving safety standards in gold mines, or requiring companies to do so.

Mercury

Inhaling mercury vapours or direct contact can cause severe neurological and kidney damage and affect respiratory the and gastrointestinal systems. Organic mercury can cause irreversible nervous system and brain damage, e.g., loss of motor control, numbness in limbs, blindness, and the inability to speak. Mercury attacks the central nervous system and endocrine system and adversely affects the mouth, gums, and teeth. Harmful effects passed from a mother to her foetus include brain damage and birth defects.

Mercury is also bioaccumulative, which means that as it passes up the food chain its concentration in the increases. body For example, if humans eat fish that have been exposed to mercury, they will have higher concentrations of mercury in their body than if they were exposed themselves. Information from the Encyclopaedia of Columbia University Press as sourced at www.answers.com

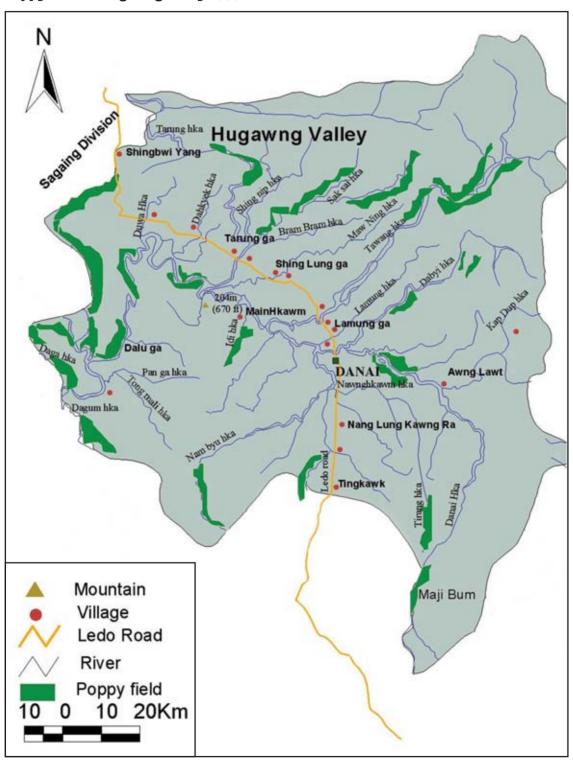


Social changes resulting from gold mining expansion

As the gold mining industry commercialized and expanded, gold dealers, hawkers, peddlers, gambling den owners, and all types of people flocked to the Hugawng valley, creating "boom towns" such as those studied for this report. In a typical mining area, about half of the population are gold miners, 20% are gambling den owners, 15% are gold mine owners (subcontracting from the concession holder), and the rest work in shops, opium dens, karaoke stalls, massage parlours, bars, and restaurants. A few run ferries or drive trucks. The in-migration has also changed the ethnic makeup of gold mining areas. For example, in Tong Mali there are over 3,000 people; an estimated 40% are Shan, 30% Burman, 20% Kachin, and 10% are Chinese, Indian, and other ethnicities. This population and ethnic breakdown varies according to the location of the mining site but will still be made up primarily of migrants.

The shift from a largely agriculturally-based economy to a cash-based one, together with inflated prices, has widened the gap between the rich and the poor. The difficult working conditions in the mines and depression among young people has increased the demand for drugs while the collusion of local authorities has allowed suppliers to move in. The communities set up in gold mining areas, where men are separated from their spouses and young people separated from families, have fostered the development of the sex industry. A sense of desperation has led to widespread gambling, from which powerful figures, including the SPDC, profit. These industries have had serious social impacts, including drug addiction and the spread of HIV/AIDS. Far from seeking to alleviate these impacts, local SPDC authorities collect fees from the drug traders, brothels, and gambling dens. At the same time, token action or campaigns against illicit activities often net only small players.

Poppy fields in Hugawng valley 2005



Drugs in Kachin State

There was a small amount of opium cultivation and use among the Kachins under the rulership of the Kachin chiefs. In those days, however, it was not produced for commercial purposes. The Kachins grew poppy plants only for family medical use and opium was not considered a dangerous drug. During the British occupation, traders from the Hugawng valley would take raw opium to Ledo in India and return with cotton and cheroot cigarettes. This trade became known as "Ledo business."33

After independence in 1948, a new generation of more educated traders began to systematize the trade and sell opium on a cash basis as opposed to bartering. The end of the war and the new Ledo road also facilitated an increase in a more commercialized trade. Poppy plantations increased in the Hugawng valley and in other areas of Kachin State. Gradually, a few opium shops opened in Kachin State and some young people working as manual laborers started using opium in order to endure the hard work. Still, there were no noticeable sicknesses or social problems caused by opium. Until the 1960s, there was no heroin in Kachin State.34

Over the 1960s the process of producing heroin from opium was developed and heroin became more widely available and popular. Drug abuse, however, increased among young people in Kachin State only after 1970. Heroin from Shan State started flowing into Kachin State through the region under the control of the Burma Army and smugglers were not arrested. At first local residents used heroin freely without seeing it as dangerous.35

After signing ceasefire agreements with the junta after 1988, some armed ethnic groups began to get involved in the drug business and the trade increased even more. With the drug business flourishing, all kinds of drugs such as heroin, raw opium, and methamphetamine tablets came into Kachin State and drug abuse among young people increased. The number of deaths among drug users increased, especially in the area of the Hpakant jade mine. The Burmese government did nothing to curb the problem. Due to the worsening problem, in 1991 the KIO took action against drug dealers and punished them by death sentence. Because of this anti-drug campaign by the KIO, opium production decreased considerably for a short period of time.36

After the KIO signed a ceasefire agreement with the junta in 1994, however, poppy cultivation resumed in Kachin State. Those who had ties with government officials were allowed to engage in the drug trade and many different kinds of drugs began to flow into the state.

With the increased supply and variety of drugs, use has become an alarming problem among young people. As many people from different parts of the country flock to Hugawng valley for gold mining, the number of drug users is increasing. HIV/ AIDS infection through intravenous heroin use is compounding the social problem of drug use.

Today, drugs other than opium come to gold mining areas from the lower Chindwin River through jungle roads, and from Myitkyina, Hpakant, and Danai through the Ledo road. Drugs from the India-Burma border come to this region through jungle roads. Some ceasefire groups from Shan State and Chinese merchants also smuggle in drugs.³⁷ Raw opium is produced locally in the valley, especially in the Naga areas west of the Chindwin River. The Nagas have historically cultivated opium and traded it for basic commodities such as rice, oil, and salt, and this continues to today. The anti-drug campaigns have had almost no effect in these areas; Naga traders bring their opium to the gold mines, the rest of Burma, and even India.

Drug abuse in gold mining areas

Drug abuse in gold mining areas is common not only among miners but also others that have come to the area seeking a job. One interview for this report estimated that 80% of people in Tong mali gold mining area are addicted to opium and approximately 30% of gold miners use heroin and methamphetamines.³⁸ The majority of users are between 13-35 years old and are both men and women. A variety of factors, including depression, a lack of opportunity, especially for education, and difficult working conditions contribute to the high rates of drug abuse. While drug users in cities like Myitkyina may be "children of well-to-do people and government officials," users in gold mining areas are most often living "from hand to mouth."³⁹

Those who cannot continue their education and university graduates alike throughout Burma find themselves unemployed and eventually come to gold mining areas seeking work. Already depressed, they turn to drugs as an escape. Their lives revolve around earning money and spending their meagre income on drugs. As addiction develops, addicts find it difficult to survive.

It is not only the general atmosphere of desperation in mining areas, but also the specific working conditions of gold mining that push some to use drugs. Opium is an indispensable drug for the gold miners as it is used to endure the climate and long hours.

Opium is a natural pain killer and is used as medicine; some miners also believe that it will protect them from diseases. Heroin has similar but stronger effects that opium; users may turn to heroin after they are addicted to opium. Methamphetamines (called *yaa mah* or "crazy medicine" by Kachin and also known as *yaa bah* in Thai) provide energy and therefore allow miners to work longer hours. Opium is still the drug of choice in gold mining areas (see box: Different types of drugs), but heroin and *yaa mah* are gaining popularity.

No opportunity for an education

The SPDC's spending on education amounted to just 0.5% of its GDP in 2003, according to a UN Human Development Report. The status of national health and education has deteriorated due to lack of sufficient financial support from SPDC. According to local teachers, the number of school drop-outs has been increasing for some time because the costs of schooling are too high.⁴⁰ The quality of education has declined, and there is little hope of employment or decent income after graduation among the students.

Goldmine owners do not allow their miners to drink alcohol because it is more likely to cause aggressive behaviour and quarrels that will disturb the work. Employees are allowed to use opium, however, as it "expedites the work." In fact, some employers themselves provide miners with opium.⁴² In the long run, however, users become less able to work:

At first, drugs strengthen the users to work harder. Soon, though, they cannot work as before. They return to their former condition but still need to use drugs. When I first began using drugs I felt I had increased strength and I could work harder. But when I became addicted. I could not work any more. I could not carry loads. I was not strong enough for loading and unloading trucks. (Interview D8)

Drug addiction is extremely difficult to cure:

We know that drug abuse is not good but once we start to use, we find it difficult to quit. If I don't use drugs, my whole body aches - I feel I am burning and I'm being bitten by ants...Many young people want to receive detoxification treatment but there are no programs so far. (Interview D8)

Once users are addicted, many turn from opium to heroin to get a more powerful effect for less money. The addiction then becomes more serious. In addition to crime, addiction to heroin contributes to the spread of HIV/AIDS:

At the beginning stage of drug use, they have money and can control themselves. When they crave for drugs, they steal and try to get money by any means. They don' t hesitate to murder. When users come short of money, they share needles. In this way, the HIV virus infects from person to person. (Interview D8)

Overdosing, mental disorders, accidents, and death are other results of addiction. One interview (D1) described how a 28 year-old man who used drugs went crazy and chopped up his five siblings with a sword in 2004, while another (D8) described how two young girls accidentally took drugs that were not kept out of reach; they lost consciousness foaming at the mouth. Some users die when an injection is done improperly; others die because they cannot afford drugs.

"In gold mining areas, the climate is extreme cold and extreme hot. When you use drugs vou can endure the weather and vou can work harder. Your stamina is better." (Interview D9)



"Some drug users think of quitting at the stage of smoking. But when they come to the stage of injecting, they continue the habit and do not care if they die. They are living like soulless bodies." (Interview D8)



Drug paraphernalia in a gold mining area of Hugawng valley

Different types of drugs

Hugawng valley has a warmer climate than other areas of Kachin State. This makes the poppy sap collection process different because the sap never freezes or becomes hard. A piece of cloth is therefore used to collect the liquid from the poppies. The drenched cloth is then boiled and the sap is separated out from the cloth. This type of raw opium is called *Sumpan Kani* or "cloth opium." It is the most common form of raw opium used in the Hugawng valley. Raw opium from other areas of Kachin State or Shan State comes in small cubes, not a liquid, and is called *Hkyep Hpying*. The most common types of opium products are as follows:

- (1) Khat-pung: Raw opium is mixed with shreds of dried banana leaves, burned, and smoked by using an opium pipe. This is the cheapest and most common form of opium used in Hugawng valley.
- (2) Yen Hpau: Raw opium is boiled down to a concentrated form. It is the highest quality opium product and the most expensive. Smoking Yen Hpau, especially from an elephant-tusk pipe, is considered a status symbol.
- (3) Formula: Raw opium is mixed with cough syrup from Thailand and Indonesia for oral consumption. There are several versions of formula: some include beer, energy drinks, or sleeping pills in addition to cough syrup. It is a favourite among young people because it enhances the effects of the opium.⁴³
- (4) Some people also inject a raw opium solution boiled in water into their veins.

Heroin and methamphetamines are also used by addicts. There are three different kinds of heroin: brown, yellow, and white. Different types have different power and price. Heroin is smoked or injected. For smoking, it is placed in paper or foil, heated from beneath, and the smoke inhaled through a cone-shaped paper cup. For injection, it is mixed with distilled or boiled water to inject into the veins. The blood in the vein is drawn into the syringe first, and the heroin mixed with blood is then injected back into the vein. The amount of heroin injected into the vein depends on the drug user's resistance. *Yaa mah* tablets are evaporated in foil by controlled heating underneath. The smoke is inhaled through water in a plastic bottle through plastic tubes or straws.

The price of drugs

The drugs most widely produced locally in Hugawng valley are the raw Sumpan Kani and khat-pung opium product. Other kinds of drugs come into the valley from Shan State, India, and China border areas. 44 A penicillin bottle cap of heroin is sold for approximately 500 - 1.000 kvat (US\$0.42-83 or less than \$1). A drug addicted youth uses a penicillin capful of heroin 3-5 times per day, therefore spending at least 1,500 – 2,500 kyat (US\$1.25-2.08) on drugs everyday. As a daily worker in the mines makes only 1,500 kyat per day, it is clear that drug addicts wind up living on the edge of financial security.



The drug trade in goldmine areas

Drug dealers make their way to gold mines where they can sell drugs more freely, the demand is high, and people have disposable income. Some who are selling drugs in gold mining areas are also often living "from hand to mouth" and run drug shops because they are too poor to find any other means of earning an income. They cannot afford to invest in the gold mines; some even need to borrow money to open opium shops. One drug seller in Tong mali said:

I planned to dig gold after my baby was born, but my child is still too young and I haven't regained my strength. I borrowed money and I deal drugs just to earn a little money to survive. (Interview D13)

The involvement of local authorities in the drugs trade is well known and they openly frequent opium dens. One shop keeper in Tong mali reported her experience as follows:

"I don't want to live here anymore - there are too many drug addicts. I will leave for home when I get money by selling my store. Goldmine committee members and many soldiers are among the addicts, as well as gold miners and people from all walks of life. Some government officials also come here and use drugs. They are fond of gambling, massage parlours, and opium dens. All kinds of drugs, including yaa mah (methamphetamine) tablets, are here." (Interview D12)

While the SPDC says that it is cooperating with UNODC (United Nations Office on Drugs and Crime), government authorities are actually involved in the drug business. Corruption among the authorities allows heroin and other drugs from the China-Burma border to be traded in towns and gold mining areas. A man working in an NGO team in Mytkyina explained:

"The government is arresting and imprisoning some drug dealers. But they are released when they pay between 100,000 to 5 million kyat. The main drug business is done by the wives of police, army, and military intelligence officers. The police force and SPDC army are seen to be involved in the drug trade. (Interview D1)

Police use their position of power to confiscate drugs and re-sell them through dealers that are cooperative in order to reap profits. One Union Solidarity and Development Association (USDA) member in Danai, recounted:

"In 2004, the government's special anti-drug investigation police confiscated two kilograms of opium from a drug smuggler in Danai. Keeping that opium, they demanded he pay 300,000 kvat and then freed him. After that, the authorities made a plan with a local drug businessman—who was well-connected with the authorities and had an opium den—to make money with the two kilo of opium. According to the plan, the businessman sold the authorities' opium package to another drug businessman. If someone came to buy the opium from him, he would inform the police who it was, and the police would arrest the buyer. If the buyer could pay money (2-500,000 kyat) to the police, he would be freed. Regardless, the authorities would take over the buyers' opium and begin the process again. In this way, the authorities in Danai were involved in the drug business and made money by making agreements with some local drug businessmen." (Interview D3)

"The police arrest only small-scale dealers. They never take action against big drug dealers. Those in the drug trade cooperate with the police by paying a monthly tax and the authorities protect drug business owners who can pay them bribe money. If the government leads an anti-drug campaign, it is not possible to abolish drugs." (Interview D8)

Token anti-drug campaigns

In 1999, apparently to gain international support, the SPDC started an anti-drug campaign with the motto "Drug Free State in 15 Years." The plan is divided into three phases with a goal of total elimination of cultivation by 2014. The designated areas of the plan are: 22 townships in northern, southern and eastern Shan State in the first phase, 20 townships in northern, southern, and eastern Kachin and Shan states in the second phase, and a further 9 townships in Kachin State in the third phase. The plan, however, has not been working in practice. As has been documented in Shan State, in order to maintain

control over ethnic peoples without reaching a political settlement, the regime allows numerous local militia and ceasefire groups to produce drugs in exchange for cooperation with the state. These policies render "anti-drug" campaigns meaningless. 45

In 2002 a joint anti-drug campaign was launched by the SPDC, KIO. and the New Democratic Army Kachin (NDAK), another Kachin ceasefire group. It began in the border areas with China and has been moving through Kachin State step by step. From February to April, 2002, 4,176 acres of plantations were destroyed. 46 The campaign reached the Hugawng valley in late 2004 and was carried out by the KIO and the SPDC. A report officially released by the KIO mentioned that merely 339 acres of poppy farms were destroyed in Hugawng valley during the 2004-2005 campaign. ⁴⁷ An elderly man

Box: Extra-iudicial killing under SPDC anti-drug campaign

While authorities are profiting from the drug business, SPDC troops act ruthlessly during drug eradication campaigns. The case below describes how a young opium farmer was beaten to death after fleeing in fear from an SPDC battalion patrolling along the Ledo Road.

"On February 26, 2005 my son (age 28) and two of his friends were collecting opium sap in his poppy farm when SPDC troops from LIB 298* led by Sergeant Myo Htun, came to the farm. My son and his two friends fled in fear. Sergeant Myo Htun fired at them. My son was hit in the thigh. The soldiers found him still alive, dragged him by his feet, and beat him to death. The body was sent to Danai public hospital. Until that time, we did not know that he had died, because the authorities did not inform us of the arrival of the body to the hospital. A policeman friend of ours told us that he had seen the body in the hospital. We were not paid any compensation money for the death. Later, some policemen brought documents with the medical doctor's signature on them, and demanded that we pay the medical expenses. I told them that I had no money to pay them and they left. The government has done nothing to clear the case of my son's death.

We are devastated because the most reliable member of our family has been murdered. We did not submit a complaint to any authorities because we know that they would not do anything for us. They will definitely do their part to win the case and our family members will incur trouble upon themselves. We can't help it although we want to accuse them. In the end, we won't report the case to anyone."

- The mother and older sister of the victim (Interview D10)

^{*}LIB 298 was operating with troops from IB 86, LIB 238 and 318 together with a special anti-drugs department in the eradication campaign. LIB 298 is based in Dum Bang village.

in Hugawng commented on the ineffectiveness of the campaign:

"The anti-drug campaign was very good in principle. A special anti-drugs department, police, and the army cooperated in the campaign. They cut down and cleared poppy plants where they could be reached easily. But, the poppy plantation owners who could pay bribes were left untouched. There are still plenty of poppy fields where the authorities have not visited. Only those who could not bribe them were arrested.

Therefore, there are still plenty of poppy fields in Hugawng valley. The campaign seems to have only raised the price of opium. Soldiers and policemen who were in the anti-drug campaign teams themselves boiled and smoked opium when they came to poppy farms." (Interview D4)

The SPDC propagates to the international community that Burma is becoming a drug-free state. At the same time, it is doing its best to block domestic news from leaking out abroad. An employee at the NGO Medicins du Monde stationed in Myitkyina relates his experience: "In 2004, a foreigner came to Ubyit village where drugs were sold freely and took some pictures of an opium shop. The authorities heard the news and burned down the opium den immediately. That is how SPDC is covering up the real situation inside the country." 48

"I'm from Rangoon, but my parents got separated and I came with my father to this place. Now I have no chance to go to school. Every day I am helping my father panning gold. I want to go back to my mother and attend school, but for now I am just trying to save money." (Interview G12 with an 11-year old miner)

A child's experience in the gold mines



The sex industry in gold mining areas

Economic desperation, hopelessness, and separation from families all contribute to an expanding sex industry in gold mining areas. A typical shop assistant in a gold mining area makes between 5-10,000 kvat (US\$3.80-7.70) per month, a cook double that amount. Although shop owners often provide accommodation and food, this meagre salary must pay for clothes, medical expenses, and any family needs. Sex work, in contrast, can bring in between 1-5,000 kyat per customer. The low wages offered for non-sex work are often cited as a reason that women take up the trade to earn more money:

"After my parents died I lived in my relatives' home. They could not afford to look after me and sent me to Kachin State. I worked as a housemaid for four years. My hosts failed in business and told me that they could not employ me anymore. So I came to the gold mine area. I worked as a salesgirl at a store but I could not earn as much as I expected. I was depressed and drank beer to entertain myself. At my wits' end, I entered this profession." (Interview S19)

Women often need to earn money in order to provide for their families. Another woman took up sex work in the gold mining areas because her family needed her support and her wages as a cook were not sufficient:

"My family situation is the reason [I took up sex work]. My father was getting old. My mother's health was not like others. First I went to gold mining areas to do some business. When I was a cook there. I associated with the gold miners. Later, I charged them money. They called on me and paid me money..." (Interview S18)

The poverty which deprives students of the pursuit of university education forces them to take any profession and is one cause which drives young women into the sex trade:

"I came to earn money for my university education. I sat for the first year examination while I was working as a cook. I could not earn enough money and I was discouraged. As a cook I associated with gold miners for sometime.... eventually I entered the professional sex trade with the idea of doing it only until I graduated." (Interview S5)

Another sex worker said:

"I could not bear the pain of poverty and came here to find any way to earn money. At first I sold at a grocery. Then I worked as a cook. I cooked snacks and made barbecue for drinking customers. Eventually I myself began to drink too much and I came to this profession [sex work]." (Interview S5)

"I was looking for jobs so that I could go to school....when I reached grade 9, a friend told me that I would earn more if I went to the gold mine areas. When I was working as a cook, I got a boyfriend and lost my virginity. When I was with my third boyfriend I lost my job. My boyfriend did not keep his promise to marry me. I became publicly known and the gold mine elders told me to leave. My reputation was ruined. So I came to do this profession [sex work] for a living" (Interview \$15)

Often the cycle of shame brought on by social stigma caused by extra-marital sex determines that a woman will turn to or continue to perform sex work. Several women mentioned being cheated or misled by boyfriends as a factor leading them to sex work while others mentioned divorce or separation from husbands:

"Four years ago when I was in grade four, my life was spoiled because I had a Burmese soldier boyfriend. When their troops moved he said he could not marry me because he already had a wife. I was devastated. I lost face in my village and I came to Danai gold mine area to settle my life as a cook..." (Interview S12)

"I had a thorny relationship with my husband and left him to go to Hpakant [gold mining area] where I took up sex work. I repented and returned home only to be kicked out of home by my parents when they learned about me. I came back to this gold mining area [Awng Jat Hmaw] to lead a decent life with a proper job, but my salary as a cook was not enough and I fell back into this profession." (Interview S3)

Rape by Burma Army soldiers has also impacted women. As the SPDC military has expanded its strength in Kachin State, more women in villages have been raped by soldiers. Rape victims ashamed to live in their villages eventually came to gold mine areas to work. Such incidents seem to be contributing to the sex industry.

Most women engage in the sex trade due to the difficulties they have faced in their lives. In very few cases do sex workers come to gold mines with the intention of being engaged in the professional sex trade. Most come to work as shop assistants or cooks and then gradually get caught up in sex work. Once these women start sex work, they are not received well or even accepted by their own fellow villagers in their own home towns. Therefore, these girls dare not return home but struggle to make ends meet.

"Because I wanted to be educated so much, I went to the hill region to earn money selling goods. There I was raped by a Burmese soldier and my life was ruined. I was only in grade eight and I was determined to pass the exam with distinctions. But when I lost my virginity I felt ashamed and went to Myitkyina. While I was working as a house helper there. I agreed with my friends to take hairdressing lessons with the intention of opening a barber shop in Danai town. Then I went to Awng Latt gold mine area to start a barber shop / massage parlour." (Interview S14)

Collecting on others' desperation

Those who would make a profit from the sex trade, including SPDC authorities, encourage the industry and diminish efforts to curb it in order to safeguard their own profits. Most karaoke shops in the Hugawng valley belong to superintendents of local gold mines and businessmen. The situation in Shingbwi Yang, a gold mining area completely controlled by the SPDC in the north of the valley, is markedly different, however. As described in the case study on the following page, SPDC authorities in Shingbwi Yang not only allow, patronize, and profit from an open brothel, they also collude with local businessmen to capture and re-sell women who try to escape from the brothel. On at least one occasion, those who tried to help captured women were punished by Regional Operations Command authorities after local and township SPDC authorities were implicated in the capture and re-sale of sex workers to a brothel.

The dangers that sex workers face

Forced prostitution without any means of escape is clearly being practiced in the Shingbwi Yang gold mining area. Those that try to escape are resold back into the trade and those trying to help face retribution from the authorities. Sex workers interviewed in the capital city of Myitkyina also testified to forced sex work in brothels, including deceit and forced abortions (Interview S9). The nature of the sex industry leaves sex workers exploited and in danger.

Women working in massage parlours in gold mining areas report that most often the parlour owner will take 2/3 of the customer's payment, leaving the woman with the remaining 1/3. According to interviews conducted for this report (see appendix), this means that women are selling their bodies for less than 1,000 kyat (approximately US\$0.75). If there are no customers for the night, the women earn nothing at all. For those working on their own, the collection of payment can be difficult. Said one sex worker: "Sometimes customers come here drunk and don't pay me. There's nothing I can do about it." (Interview S19) This can also be a problem in terms of protection from sexually transmitted diseases.

In all cases, the threat and knowledge of violence leave women with few choices in such conditions. Said one interviewee: "I have heard of rape and murder cases." (Interview S4)

HIV/AIDS

Sexually transmitted diseases such as syphilis, gonorrhoea, herpes, and fungal infections appear to be common in gold mining areas. The prevalence and spread of HIV/AIDS, fuelled by the sex industry and intravenous drug use, is possibly the most pressing health problem,

"When customers are drunk, and sometimes even when they're not, they don't want to use condoms. This makes me crazy - I don't want to do it but I have to do it. I am just fed up with men like this." (Interview S5)



A male customer waits outside a massage parlour in a gold mining area

Case Study: Collusion of SPDC authorities in forced prostitution

"In 2005, some members of the Myanmar Women's Affairs Federation (MWAF)⁴⁹ went to Shingbwi Yang gold mining area to raise funds. They arranged for a stage show but no one came to it because everyone was only interested in gambling. They weren't able to raise funds and planned to leave but were approached by some Naga girls who were sex workers.

The sex workers told the members about two girls that had run away from a Mr. Kyaw Win who ran a brothel in the area. The two had been caught by the police and sold back to the brothel. The members realised that something should be done; they inquired about the brothel and decided to go.

When they arrived, a Burmese army sergeant was collecting money at the corner. The two girls that had been arrested and returned were there. They were Rawang and Lisu, aged 16 and 20. Originally they had been brought to work at a restaurant and when they reached the gold mining area were sent to the brothel. Their services were worth 5,-10,000 kyat (US\$3.85-7.70) per customer. They were threatened not to be fed unless they did the work. They were malnourished because they had been underfed. When they fled, the police captured them and sold them back to the brothel owner at a price of 20,000 kyat (USD\$16). Army officers were regular customers of the girls as well as businessmen.

The MWAF members recorded the voices of the captured girls, took photos, and took the girls to a restaurant. The commanders of the local SPDC post and the Danai Township Peace and Development Council (*Ma Ya Ka*) were afraid that their reputation would be spoiled; the next morning the secretary of the Regional Operations Command (*Da Ka Sa*) based in Danai (U Kyaw Oo Lwin) offered 100,000 kyat to get the girls back and protect his reputation. The MWAF members wouldn't let the girls go, but accepted the money as compensation for the girls. The acceptance of money was photographed.

Soon after that, all the photographs and recorded tapes were confiscated by the *Da Ka Sa*. They interrogated a MWAF member and forced her to resign. The Women's Affairs office in Shingbwi Yang is not speaking out about this issue at all due to fear and nothing is being done about it. The owner of the brothel pays an annual tax of 1.2 million kyat to the *Ma Ya Ka* and 3 million kyat to the *Da Ka Sa*; therefore the SPDC's primary concern is protecting its income, not Kachin girls." (Interview S1)

however.

HIV is hard to diagnose because of a lack of testing facilities. One doctor working in Tong mali estimates that only three or four out of one hundred get tested for HIV. Those who are tested are found to be HIV positive. He notes, however, that most people do not get tested because they have little knowledge about health issues or they just do not want people to know about their health condition. The doctor purchased testing equipment but few people came to be tested. The doctor sums up the problem this way:

"There are many people from all walks of life in the gold mining areas. It is a business centre, not a community. People are not stable: they move from place to place and do not bring their house registration documents to the gold mining areas. Both married men and married women do not bring their spouses or family members. They fulfil their sexual needs and contract HIV when they do not use condoms. In case of infection, they inquire and buy medicines without a physician's prescription or proper advice. No NGOs or government organizations come to solve the problem. Educational outreach is much needed. Even community leaders lack understanding." (Interview G7)

In gold mining areas in Hugawng valley, there are no public outreach campaigns for the prevention of HIV, no proper testing facilities, and no treatment services. The doctor's sentiments also reflect the human resource problem facing the health sector:

"More money should be allotted for education and health. Only when the public is educated will our homeland develop. Technology and modern medicine is everywhere nowadays but we don't have people who understand how to use these tools properly." (Interview G7)

According to a UNODC estimation made in 1997, 95% of AIDS infections in Kachin State are caused by intravenous injection of drugs.50 A report by a French medical research team in 2000 noted that a 77% HIV prevalence rate has been estimated among injecting drug users. The report also noted that "a feature of the Kachin State HIV/AIDS epidemic is its heterogeneity involving multiple transmission patterns due to a wide range of high-risk practices: the widespread use of heroin, a volatile population, and a high demand for commercial sex in the economic boom areas (mining areas)."51

According to the minutes of a top secret SPDC meeting called by the Northern Commander from September 25-27 in Myitkyina, 9,643 soldiers in the northern command are currently infected with HIV. Of these, 458 are officers. The number of soldiers with Hepatitis B is 6,384. 1,724 are officers.



A massage parlour in a gold mining area



Inside a massage parlour in a gold mining area



A woman runs the table at a gambling centre in gold mining area; a karaoke bar is in the background

Gambling in gold mining areas

One of the problems that migrants immediately encounter in gold mining areas is the inflated price of goods. A packet of rice that may cost 10,000 kyat in Myitkyina is 20,000 in a gold mining area. A bowl of curry that sells for 300 kyat in the capital costs nearly 1.000 in a gold mining area in Hugawng valley. Daily wage earners, cooks, and shopkeepers are often completely dependent on their bosses for food and accommodation, often reinforcing an exploitative relationship. It is common to borrow money in order to make one's way to a gold mining "town." After arriving, migrants find they cannot make enough money to send home as they had promised or even to manage themselves. Many return home carrying the same or larger debt than they left with.

Amidst these conditions, gambling is extremely popular in the gold mining areas. Those with new-found cash want to earn more money more quickly in order to feed their drug habit, send money back home, leave the gold mining area, or finance education or a business. A sense of desperation fuels gaming and betting; for many, it seems that the only way out of the gold mining area and its problems is to hit it rich by gambling.

"I am upset living in this goldmine area. Selling groceries at the stores is not profitable now. It is hard to make ends meet. Not much gold is available. I've been waiting just for Che (lottery) luck. This goldmine has become a Che lottery center. Many gold miners, gold mine owners, and shopkeepers are waiting for the day of going home when they win the Che. Some have returned home after winning. Everyone is waiting for their lucky day. I'll go home too, when I have saved enough money." (Interview G8)

Some spend all their earnings on the lottery or other games easily available in the mining areas. It is not uncommon for daily workers to spend their entire day's wage at card tables or gambling centres. Deepening debt can lead to crime, including theft and murder. One case of a women who was murdered for her lottery winnings (see box) illustrates how desperation leads to crime in gold mining areas.

In addition to the dangers that winners face, women and young girls used at gambling centres, especially to sell Che lottery tickets, also risk sexual harassment and abuse as selling lottery tickets is a very common job for women in gold mining areas.

"When you come to a gold mine, you wind up doing an unexpected job. That is selling Che lottery tickets. Gold mine areas are booming not because of gold but because of the *lottery.*" (Interview G11)



Card playing centre in a gold mining area

Collecting profits from local agents

Several actors are benefiting from the gambling mania. These include gambling dealers, the gold mining committee, and SPDC authorities. Although gambling is officially illegal in Burma, local SPDC authorities profit by operating a gambling licensing system operating in mining areas. In Shinbwi Yang, for example, anyone wishing to run a gambling operation must first purchase a licence from the village level SPDC officer or the township officer.

In areas where the KIO maintains some local level administration, casino owners and gambling dealers purchase a one year lease or concession from and pay taxes to the gold mining committee to operate their business. Rates for the operation of different types of gambling centres in Tong mali are given below as an example. In addition to the purchase of the licence, dealers must pay an annual tax of 20 million kyat or US\$1,540 to the committee.

Gin roulette centre	10 million kyat
Card playing centres	•
Billiards	-
2-digit lottery	10 million kyat

Even in these areas, the gold mining committee is only allowed to operate these auctions by paying a share of its revenue to the SPDC authorities. KDNG was unable to obtain figures on the exact amounts of this tax. However, the relationship is clear: the SPDC will not crack down on the gambling centres as long as they are paid their cut of the profits from the business. In addition to the formal percentage at the higher level, SPDC authorities can and do visit gambling centres at will and demand bribes from dealers.

The larger dealers then run their businesses by selling licenses for retail gambling centers to smaller dealers. The small dealers set up several games and lotteries to please all types, including billiards, 21cards, 36-roulette, 4 and 6-animals roulette, the Che lottery, and the 2-digit lottery.

The small dealers in fact can make little profit as they are squeezed by the owners of the lease or concession. One complained:

"Before the auction system started, one Che ticket cost 100 kyat; it costs 250 kyat now. We have to buy calendars that advertise the schedule of the lottery days from the lease owner or we will be arrested. It used to cost 100 kvat but now it's 500-1,000 kvat. If it doesn't have a proper seal we will be fined 50-200,000 kyat. If a packet of Che lottery tickets has a winning number on one of the tickets, the ticket seller has to pay 3,000 kvat to the dealer. The amount we have to pay consumes all our benefits." (Interview G10)



The belongings, including the winning ticket, of a girl who was raped and murdered for her winnings

The curse of winning: the case of a Che winner

On March 24 (2005) a 28 year-old Rawang (Kachin) girl named Ah Nang won 1 million kyat from the Che lottery. She was very excited and determined to return home to Putao. The day after drawing her winnings, she made for Pangka gold mine to collect money from her debtors so that she could go home and not have to return again.

On March 28, a woman's body was discovered in a ditch on the way to Pangka. As soon as the incident was reported the gold mine administration committee members and office staff went to see the site. The victim's face was not properly recognizable; almost all of it was eaten by maggots. In the end they were able to determine that it was Ah Nang. She had been raped and murdered by a blow to the head with rocks. The body was turned face down afterwards. It is not yet discovered who killed her; it appears that she met her murderers the day after collecting her Che winnings. (Interview G14)



Conclusion

Hugawng valley is rich in natural resources, including large quantities of gold. These resources, however, are not benefiting the local residents, but mainly the SPDC authorities and a handful of businessmen and companies.

The SPDC has taken advantage of the 1994 ceasefire with the KIO to expand its military presence in Hugawng valley. The valley is now under the strict control of three battalions, one artillery unit and a Regional Control Headquarters. The SPDC has changed local place names in Danai from Kachin to Burmese, and has confiscated local residents' houses and farms to expand its own infrastructure and to pave the way for relatives and associates of SPDC authorities to settle in the region. Driven from the lands of their forefathers, local people have been forced to become day laborers in gold mines, while others have moved to distant towns for subsistence.

In order to expand and ensure its control over gold mining revenues, the regime has sold large mining concessions to selected companies in Hugawng valley since in 2002. This has transformed gold mining from independent gold panning to a large-scale mechanized industry controlled by the concession holders. The regime's Ministry of Mines collects large signing fees for the concessions as well as 35% - 50% tax on annual profits. Additional payments are rendered to the military's top commander for the region, various township and local authorities as well as the Minister of Mines personally.

Local residents have had to bear various social ills from the gold mining ventures. People have lost their livelihoods, access to health care and education is minimal, and traditional cultures have weakened. Drug addiction, debt, and HIV/AIDS are sweeping through gold mining areas and these problems are further spread when migrants return home. Comprehensive damage has been wreaked on the natural environment;

surrounding rivers and streams are polluted with discarded mercury and petrol. Future Hugawng valley residents will undoubtedly be subjected to greater health risks along with the loss of their natural resources.

The development projects currently implemented by the SPDC are not focused on benefiting the local Kachin people but on extending the SPDC's military force and providing for its interests. This situation cannot continue. KDNG therefore recommends the following:

To the people of Kachin State:

- Become better informed about the devastating social and environmental impacts of the current natural resource exploitation process and the root causes of these problems
- Actively participate in the development of your community and support those persons who dare to speak out against the current destructive development process

To the international community:

- Raise concerns with the SPDC at every international and bi-lateral meeting about its promotion of socially and environmentally damaging resource extraction
- Support locally-based organizations and activists in their efforts to protect their lands and human rights and to find durable livelihoods
- Reevaluate support for environmental protection programs inside Burma to ensure that they are not simply "green washing" the regime's policies of militarization and rampant resource exploitation under the guise of environmental protection

To the SPDC:

- Immediately begin tri-partite dialogue with the National League for Democracy and the ethnic nationalities so that genuine democracy and a democratic development process can be established in Burma
- Stop military expansion in Kachin State and withdraw existing military bases from the state

KDNG believes that a better future is possible in which:

- Local people will be able to participate in making decisions about the development of their natural resources
- Gold and other natural resources will not be rapaciously extracted in disregard of the local residents' interests
- Livelihoods other than gold extraction that are not harmful to health and the environment will be developed as alternatives
- Lands and rivers previously damaged and polluted will be properly rehabilitated
- Women will have a choice of viable livelihoods and education and therefore not be forced into sex work
- Youth will have access to education and viable livelihoods in order to realize their full potential and not be tempted into drug addiction

Footnotes

- ¹ "Biodiversity hotspots for conservation priorities," Norman Myers, Russell A. Mittermeier, Cristina G. Mittermeier, Gustavo A. B. da Fonseca, and Jennifer Kent, article in *Nature: International weekly journal of science*, February 2000
- ² Information from http://www.goldenpagodatravel.com/HukawngValleyExpedition1999l.htm
- The major groups are the Rawang, Zaiwa (Azi), Lowao (Maru), Lachik (Lashi), Lisu, and Jinghpaw. The Jinghpaw are the majority tribe and most Kachin can speak Jinghpaw in addition to their own language. Despite linguistic differences and variation in other aspects of culture such as dress, there is a commonality of tradition and a sense of belonging to one another among these tribes and sub-divisions which justify their all being termed Kachin
- ⁴ At what price?, Images Asia and Pan Kachin Development Society, November 2004.
- ⁵ "The Fight of his Life" in *National Geographic Adventure* at http://www.nationalgeographic.com/adventure/ 0512/features/alan rabinowitz.html
- ⁶ Information from http://www.goldenpagodatravel.com/Burma%20creates%20huge%20tiger%20reserve.htm and www.wcs.org
- ⁷ "Hukaung Valley Tiger Reserve Myanmar" description on WCS website at http://savingwildplaces.com/swp-home/swp-protectedareas/239764, accessed on 16 November 2006.
- ⁸ "Hukaung Valley Tiger Reserve Myanmar" description on WCS website at http://savingwildplaces.com/swp-home/swp-protectedareas/239764, accessed on 16 November 2006.
- ⁹ A brief history of Hugawng valley, Wa law Bum Zau Hkawng.
- ¹⁰ Information from: www.goldenpagodatravel.com/HugawngValleyExpedition19991.htm and www.nationalgeographic.com/ngm/0311
- ¹¹ Burma Gazetteer, Myitkyina District, Volume A, compiled by W.A. Hertz, 1960 (reprint). The description does not mention if women are granted a share of the resource.
- ¹² At what price?, Images Asia and Pan Kachin Development Society, November 2004.
- ¹³ Grave Diggers: A Report on Mining in Burma, Roger Moody, 1999. The Mining Law has been criticized for its weakness and lack of clarity.
- ¹⁴ Mining, Gender, and the Environment in Burma Mining: Addressing the Gender Gap, EarthRights International, 2004.
- ¹⁵ At what price?, Images Asia and Pan Kachin Development Society, November 2004.
- ¹⁶ In Kachin State, the ministry has an office in Mytkyina.
- ¹⁷ The Northern Regional Commander is responsible for military operations in Kachin State and part of Sagaing Division. Today there are 13 regional commanders in Burma; they sit on the ruling State Peace and Development Council. Says one article "Their influence on national policy pales beside that of the Yangon hierarchy, but in the regions they rule....Commanders vet business contracts, resource extraction, property development, schools, markets, and road- and bridge-building. They control police, security and intelligence operations; no one moves in their area without their nod." From "Who Rules on the Ground?: The power of Myanmar's area commanders," at http://www.asiaweek.com/asiaweek/magazine/99/0903/nat myanmar.html
- ¹⁸ Mining, Gender, and the Environment in Burma Mining: Addressing the Gender Gap, EarthRights International, 2004.
- ¹⁹ According to interviews conducted by KDNG and Pan Kachin Development Society, it is widely believed that the Northern Star Trading Company operating in Kachin State is owned by military officers.
- ²⁰ Taxes on copper mining, gold mining, and natural gas extraction in Burma range from 30-50% of profits. See *Capitalizing on Conflict*, EarthRights International, 2003, *Burma Mining Update*, August 2006, at www.minesandcommunities.org/Action/press1194.htm, and *Supply and Command: Natural gas in western Burma set to entrench military rule*, The Shwe Gas Movement, 2006. Interviews for this report mentioned figures of 30-35% royalty tax, a 10% tax on import/export, while others simply used a direct figure as high as 50%.
- ²¹ At what price?, Images Asia and Pan Kachin Development Society, November 2004, p. 32.
- ²² Major General Ohn Myint replaced Major General Maung Maung Swe as Northern Commander in August 2005.
- ²³ Discussion with researcher in April 2006.
- ²⁴ In 2006 the Chinese Foreign Ministry announced a halt in cross-border trade not done through the central SPDC authorities: "According to the regulations of the Burmese central government, without the central government's

approval, all organizations and individuals are not permitted to sign resource development contracts with outside parties. Burma considers forestry, mining, and other resources as the state's important resources. Any resource-related development contracts that are not approved by the central government are deemed invalid contracts, and shall not be protected by the Burmese laws." "Chinese Foreign Ministry reminds citizens to abide by Burmese regulations," British Broadcasting Corporation, April 5, 2006.

- ²⁵ This change signifies a difference in paying an administrative arm of the SPDC versus a military one. The Chairman (Secretary 1) of the state level SPDC has a more administrative role while the Northern Commander is in charge of military operations.
- ²⁶ At what price?, Images Asia and Pan Kachin Development Society, November 2004.
- ²⁷ Ibid.
- ²⁸ *Ibid*.
- ²⁹ Ram Padang Journal, January 2005, and Kachin news website.
- ³⁰ "Sanctuary Under Threat," article in *The Irawaddy*, 11th October 2006.
- ³¹ Exposure to high levels of cyanide harms the brain and heart, and may cause coma and death. Exposure to lower levels may result in breathing difficulties, heart pains, vomiting, blood changes, headaches, and enlargement of the thyroid gland. Information from the Agency for Toxic Substances and Disease Registry at www.atsdr.cdc.gov/tfacts8.html
- ³² During the dry season, the boat ride from Danai to Tong mali takes 24 hours.
- ³³ Langgyi U E Pyen Yu Su, Issue 6, My Tsaw Salum, 2005.
- 34 Ihid
- ³⁵ *Ibid*.
- ³⁶ *Ibid*.
- 37 KDNG Interview D5
- ³⁸ *Ibid*.
- ³⁹ KDNG Interview D13
- ⁴⁰ Interview with a teacher in Nambyu gold mining area.
- ⁴¹ KDNG Interview D9
- 42 Ibid.
- ⁴³ KDNG Interview D2 and D8
- ⁴⁴ KDNG Interview D5
- ⁴⁵ Show Business: Rangoon's "War on Drugs" in Shan State, Shan Herald Agency for News, 2005.
- ⁴⁶ Langgvi U E Pven Yu Su, Issue 6, My Tsaw Salum, 2005.
- ⁴⁷ KDNG research in Hugawng valley, 2005.
- ⁴⁸ KDNG interview with a social worker in Myitkyina, Kachin State in 2005.
- ⁴⁹ The Myanmar Women's Affairs Federation was set up in 1996 by the SPDC. It has working committees at state, division, district, township, and village levels throughout the county which are usually led by wives of SPDC personnel.
- ⁵⁰ The next decade Myanmar forecasting: Insufficient resources to stop potentially devastating situation, www.unodc.org
- ⁵¹ "Drug-related behaviour in a high HIV prevalence rate population at Myitkyina drug treatment centre, Kachin State, northern Myanmar (Burma)" article in AIDS, Volume 14, Guy Morineau and Thierry Prazuckab, 2000.

Appendix 1

Gold mining areas and companies with concessions in Hugawng valley

NO.	COMPANYNAME	GEOGRAPHICAREA	NAME OF MAIN GOLD MININGAREA
1	Sea Sun Star Co., Ltd	A. Lower part of Danai River from Danai Town	 Tongmali We be We Naw Panka Yetkha Tagum Taw le Wanpala Nam Gawn
		B. Upper part of Danai River	10. Tinggaw Maw 11. Kadu rum 12. Shayam Yang 13. Wa Kang Zup 14. Hkaman Shang
		C. Along Sak Sai and Singnip stream	15. Lung Jung 16. Hpala tu
2	Twe Co., Ltd & Sea Sun Star Co., Ltd.	D. Nambyu /Namhkam Areas	17. Ya Mut 18. Awng Jat 19. Panji 20. Kap Sa 21. Chaung Hpya 22. Nam Mana 23. Lung Chyat 24. Gumgai 25. Dinghkum 26. Sut Chyai 27. We lin 28. Tinggaw Maw
3	Yaung Che Oo Shwe Thu Phaw Yae Co., Ltd	E. Hugawng - Sagaing Divisio border	29. Kyauk Thinbaw 30. Theik Gyi
4 5	Yadana Hein Co., Ltd Palaung Co., Ltd (Not the		zor memogr
6	Plaung ethnic group) Twe Kaw Seng Co., Ltd (Wa group)	F. Shingbwi Yang	31. Shingbwi Yang
7	Northern Star Co., Ltd		
8	Buga Co., Ltd		

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Gold Mining Interviews

N_0	Interview date	Sex & Nationality	Age	Occupation	Address	Interview place	Subject
G1	March 3, 2005	Male	45	Farmer	Kinsara Danai	Danai town	The vocation and development of the local people in Hugawng valley Location of gold mining areas and companies involved
G2	March 11, 2005	Male	40 /	Local head man / KIO officer	Tong mali gold mine	Tong mali gold mine	The background history, population, kinds of businesses, and development of Tong mali gold mining area
G3	June 10, 2005	Male	50	Staff of Sea Sun Star Co., Ltd.	Yuzana Myitkyina	Tong mali gold mine	The collection rate of gold and the tax to the authorities
G4	June 10, 2005	Female	33	Jewelry store owner	Myitkyina	Tong mali gold mine	The gold price and the gold business in gold mining area
G5	June 10, 2005	Male	46	A secretary of gold mine admin committee	Danai	Tong mali gold mine	The population, kinds of business, and types of people in gold mining areas
9D	March 11, 2005	Male Male/	48	Member of gold mine committee	Danai	Tong mali gold mine	Injuries, deaths, and kinds of gambling in gold mining area
G7	Mach 3, 2005	Female	50 /	Doctors	Rangoon	Tong mali gold mine	Health conditions in the gold mining area

No	Interview date	Sex & Nationality	Age	Occupation	Address	Interview place	Subject
G8	March 10, 2005	Female	34	Restaurant worker	Namti	Tong mali gold mine	The general situation of the gold mining area
G9	March 11, 2005	Male	25	Gold miner	Mo gawng Thaungni	Tong mali gold mine	Mining accident
G10	June 10, 2005	Female	37	Owner of gold smith shop and a textile store	Myitkyina	Tong mali gold mine	Gold production rate and the places to sell gold
G11	June 10, 2005	Female	28	Restaurant worker and lottery seller	Myitkyina	Tong mali gold mine	Che lottery
G12	June 11, 2005	Male	111	Miner	Rangoon	Tong mali gold mine	A child's experience mining in a gold mining area
G13	June 10, 2005	Male	23	Miner	Tha law gyi	Tong mali gold mine	The condition of miners
G14	June 10, 2005		50 45 50	Gold mining committee		Tong mali gold mine	Social problems and the rape case in gold mining area
G15	January 10, 2005	Female	42	Gold mine owner	Myitkyina	Myitkyina	Conditions in gold mining areas
G16	April 2005	Male	75	Deacon	Danai	Danai	Vocation and development of the local people in Hugawng valley

No	Interview date	Sex & Nationality	Age	Occupation	Address	Interview place	Subject
G17	April 27, 2006	Male	09	Elder	Danai	Danai	Mining continues after the ban
G18	April 28, 2006	Male	30	Gold mine owner	Shingbwi Yang	Shingbwi Yang gold mine	Gold mining concession payments to SPDC and gold mining owner payments to concession holder
G19	April 28, 2006	Male	35	Miner	Nambyu	Nambyu gold mine	Mining continues after the ban; control of commodities by concession holder
G20	May 5, 2006	Female	25	Staff of mining company	Myitkyina	Myitkyina	Payments made by company to various SPDC officials; gold mining continues despite ban
G21	April 26, 2006	Male	40	A resident of Danai	Danai	Danai	Environment problems from gold mining
G22	May 25, 2006	Male	25	Gold miner	Danai	Danai	Gold mining continues despite ban; large companies taking over gold mining and paying SPDC; sex industry in gold mining areas
G23	April 28, 2006	Male	28	Miner	Shingbwi Yang	Shingbwi Yang gold mine	Did not hear of gold mining ban in SPDC-controlled area
G24	May 6, 2006	Male	40	Farmer	Mytkyina	Nawnghkying village, Mytkyina	Gold mining continues despite ban; temporary bans used to realign interests of Northern Commander
G25	August 2006	Male	50	Agent of a gold mining company	Myitkyina	Myitkyina	Tax, concession, and bribe payments from company to SPDC; payments from gold mine owners to concession holder

No	No Interview date	Sex & Nationality	Age	Occupation Address	Address	Interview place	Subject
G26	G26 August 2006 Male	Male	40	Staff of gold mining company	Myitkyina Myitkyina	Myitkyina	Tax, concession, and bribe payments from company to SPDC
G27	June 20, 2006	Male	50	Agent of gold Myitkyina Ying jiang, mining China	Myitkyina	Ying jiang, China	Tax collected by SPDC; types of company owners
G28	April 27, 2006	Male	65	Employee of Danai gold mining company	Danai	Danai	Gold mining continues despite ban

Land Confiscation Interviews

No	Age	Sex	Occupation	Address	Confiscators	Brief description	Acreage confiscated	Date of confiscation
L1	50	দ	Health worker	Kinsara Qr. Danai town	Maung Maung Too Township SPDC Chairman and IB 86	Danai township SPDC chairman led team to confiscate housing land to construct communications office (by threats)	5	16 May 1991
L2	52	M	Farmer	Kinsara Qr. Danai town	Maung Maung Too Township SPDC Chairman and IB 86	A two-storey building and land in Kinsara Qr.3 confiscated as government property	1.5	1991
L3	45	M	Farmer	Kinsara Qr. 3 Danai town	Maung Maung Too Township SPDC Chairman and IB 86	80' x 60' housing site confiscated to construct a communications office	1	1991
L4	55	M	Farmer	Kinsara Qr.3 Danai town	Maung Maung Too Township SPDC Chairman and IB 86	80' x 60' housing site confiscated as government property	1	16 May 1991
L5	48	M	Farmer	Kinsara Qr.3 Danai town	Maung Maung Too Township SPDC Chairman and IB 86	80' x 70' housing site confiscated as government property without consulting the owner but by threats	1	1991
T6	45	M	Government employee	Kinsara Qr.1 Danai town	LIB 318	Paddy fields confiscated by force as government property	4	1991
L7	54	M	Farmer	Kinsara Qr.1 Danai town	LIB 318	Paddy fields confiscated without the consent of owner	3	1995
L8	56	M	Farmer	Kinsara Qr. Danai town	LIB 318	Paddy fields confiscated without consulting owner but by threats	3	1995

No	Age	Sex	Occupation	Address	Confiscators	Brief description	Acreage confiscated	Date of confiscation
Г6	57	M	Government	Kinsara Qr.1 Danai town	IB 86 and LIB 318	Paddy fields in Tsap gap pa area confiscated as army property without consulting but threatening the owner	L	1995
L10	72	M	Farmer	Kinsara Qr.1 Danai town	IB 86 and LIB 318	Paddy fields confiscated without consulting but threatening the owner	4	1995
L11	09	M	Farmer	Kinsara Qr.1 Danai town	LIB 318	Paddy fields confiscated	3	1995
L12	59	M	Government employee	Kinsara Qr.1 Danai town	IB 238	Paddy fields in Tsap gap pa confiscated by army as military property	9	1994
L13	64	M	Farmer	Dugawng Qr. Danai town	IB 86, 238 and LIB 318	Paddy field taken by force as army property	4	1994
L14	29	M	Government Employee	Dugawng Qr. Danai town	IB 86, 238 and LIB 318	Paddy fields confiscated by threat	5	1992 1994 1997
L15	99	M	Farmer	Dugawng Qr. Danai town	IB 86 and LIB 318	12 acres of paddy fields confiscated as army property		1992 1994
L16	56	M	Farmer	Hugawng Qr. Danai town	IB 238	Paddy fields in Tsap gap pa area	5	1991
L17	64	\boxtimes	Farmer	Dugawng Qr. Danai town	IB 238	Paddy fields confiscated by army	9	1993

No	Age	Sex	Occupation	Address	Confiscators	Brief description	Acreage confiscated	Date of confiscation
L18	50	M	Farmer	Hugawng Qr. Danai town	IB 238	Paddy fields confiscated by army	4	1993
L19	54	M	Farmer	Hugawng Qr. Danai town	IB 238	Paddy fields confiscated by army	4	1993
L20	09	M	Farmer	HugawngQr Danai town	IB 238	Paddy fields in Tsap gap pa area confiscated by army	N/A	1993
L21	70	M	Farmer	Kinsara Qr. Danai town	IB 86 and 238	Paddy fields confiscated by army	8	during 1992 and 1998
L22	61	M	School Teacher	Kinsara Qr. Danai town	IB 86 and 238	Land and fruit garden with 106 orange trees confiscated by army	5	1992 1994
L23	ı		Farmers and business owners	Danai town	IB 86, 238 and LIB 318	Over 100 acres of housing sites from the Danai bridge to La Mawng village in the south part of Danai confiscated; lands divided into 60' x 80' plots and sold to business owners; remaining land used as fire brigade, forestry office, timber mill, and army site.	>100	2003 2004
L24	-	1	Farmers	Danai town	IB 238	11 households, 10 acres of housing sites confiscated to extend market area	10+	1994
L25	1		Farmer	Mungding Qr. Danai town	IB 238	3 household compounds confiscated and made Buddhist Mission Compound	ŀ	1992 to 1994

No	Age	Sex	Occupation	Address	Confiscators	Brief description	Acreage confiscated	Date of confiscation
L26	59	M	Farmer	Hugawng Qr. Danai town	IB 86	Land confiscated	5	1994
L27	62	\mathbb{Z}	Farmer	Dugawng Qr. Danai town	IB 86	Fruit garden with 90 fruit trees confiscated	4.5	1994
L28	58	Γī	Health Worker	Punghkung Qr. Danai town	IB 86	Garden with 50 fruit trees confiscated	3	1995
L29	40	M	Farmer	Simsa Qr. Danai Town	IB 238	Two-storey wooden building	-	1992
L30	70	M	Pastor	Dugawng Qr. Danai Town	IB 86, 238 and LIB 318	Fruit gardens on the side of Ledo Road near "Welcome to Danai" sign confiscated as army property	7	N/A
L31	29	M	Farmer	Dugawng Qr. Danai Town	IB 86	50 fruit trees confiscated	5	1993
L32	50	M	Farmer	Danai Town	IB 86	40 lemon trees confiscated	4	1993, 1994
L33	29	M	Farmer	Danai Town	IB 86	Fruit garden with 120 sweet lime trees was confiscated	5	1994
L34	70	M	Farmer	Danai Town	IB 238	Fruit garden with 110 sweet lime trees, 300 tea plants, and 50 grape fruit trees was confiscated	8	1993, 1994

No	Age	Sex	Sex Occupation Address	Address	Confiscators	Brief description	Acreage confiscated	Date of confiscation
L35	69	M	Farmer	Kinsara Qr. Danai Town	IB 86 and 238	Fruit garden with 120 sweet lime trees, 100 lime trees, 120 pomelo trees, and 200 tea plants confiscated	12	1992, 1993, 1994
L36 61	61	M	Farmer	Kinsara Qr. Danai Town	IB 86 and 238	The Kinsara community was confiscated to construct a sports ground	N/A	N/A
L37	50	M	Farmer	Punghkung Danai	IB 86 and 238	"relatives of SPDC officers are occupying lower parts of the Danai River"	I	I
L38	26	M	Farmer	Simsa Qr. Danai	Land Survey Department	"those houses that could not afford to build iron sheet roofing and wooden floors on the Ledo Road were confiscated"	N/A	2003-2004

Drug Industry Interviews

No	Date of Interview	Sex	Age	Occupation	Location of Interview	Details
D1	February 12, 2005	M	30	Staff of medical NGO	Myitkyina	 Background history of drug abuse in Kachin State Comparison of drug use before 1994 and present Condition of drug use among youth
D2	February 18, 2005	M	23	Drug addict UDSA	Danai township	Varieties of drugs usedSeveral types and methods of drug use (heroin, formula, opium)
D3	June 6, 2005	M	36	member	Danai township	 Brief history of drug abuse in Kachin State
D4	June 7, 2005	M	09	Opium field owner	Danai township	 Local resident's opinion of the SPDC's drug eradication campaign
D5	March 11, 2005	M	45	KIO officer	Tong mali	Situation of drug abuse in gold mining areaThe involvement of local authorities in drug busines
9О	March 11, 2005	Σ	35	KIO officer	Tong mali	 Situation of opium fields in Naga areas close to Hugawng valley The rate of drug production and how drugs are smuggled to Hugawng valley
D7	June 10, 2005	M	28	Gold miner	Tong mali	The reason why he uses drugs and what kind of drugs he usesThe amount of drugs he uses everyday and how much money he spends
D8	February 2005	M	23	Drug addict	Myitkyina (used to live in gold mining area)	 How he became drug addict, the amount of drugs he uses, the situation of young drug addicts How NGOs help drug addicts The prices of several drugs Types of drugs commonly used

No	Date of Interview	Sex	Age	Occupation	Location of Interview	Details
						 The comparison of his feelings before and after using drugs His opinion on the drug eradication policy of SPDC
D9	March 12, 2005	Σ	28	Gold miner and drug addict	Tong mali	 The situation of Pang Ka gold mining and the reasons why gold miners use drugs Average drug use among addicts
D10	June 10, 2005	M	28	Miner and drug addict	Tong mali	 The reasons why he came to use drugs and average time of drug use
D11	February 17, F 2005	Ħ	60	Dependant	Danai	Why and how her son got killed by the authoritiesHow she found her son's body
D12	June 10, 2005	Ĭ L	24	Drug seller	Tong mali	 Experience as a drug seller The price of drugs and average amount of drugs sold per day How and where she got drugs and how much she has to bribe the authorities Family situation
D13	June 10, 2005	F/M 17 / 34	17 / 34	Drug sellers	Tong mali	 Their career before selling drugs Average amount of drugs sold per day What kind of persons mostly come to buy drugs Where they get drugs

Sex Industry Interviews

No	Date of Interview	Age	Occupation	Interview Place	Address	Subject
SI	June 6, 2005	28	Teacher	Danai	Punghkung Danai	Involvement of the authorities and businessmen in sex industry in Shingbwi Yang gold mining area
S2	June 10, 2005	24	Massage Parlour	Tong mali gold mining area	Myitkyina	Experience working at massage parlour in Tong mali gold mine area
83	June 10, 2005	34	Massage Parlour	Tong mali gold mining area	Namti	Experience working at massage parlour in Tong mali gold mine area
S4	February 16, 2005	20	Sex worker	Nambyu gold mining area	Paukkan Village Mandalay	Kachin woman who became sex worker in gold mining area due to difficulty to feed her family
S5	February 18, 2005	23	Student	Sut Chyai gold mining area	Myothit Bhamo	Becoming a sex worker to earn enough money to be able to continue studies in University
98	February 19, 2005	26	Sex worker	Awng Jat gold mining area	Loihki village Northern Shan State	Becoming a sex worker because of problems with husband
S7	February 19, 2005	24	Cook	Namhkam gold mining area	Namsheng Phakant Township	An orphan's experience of coming to gold mine to make some money with a decent job but ending up becoming a sex worker
88 88	February 19, 2005	25	Sex worker	Lung chyat gold mining area	Pauk Kan Village, Mandalay	Pauk Kan Village, Becoming a sex worker since family is very Mandalay

No	Date of Interview	Age	Occupation	Interview Place	Address	Subject
6S	February 20, 2005	23	Shopkeeper	Lung chyat gold mining area	Kawng ra village, Northern Shan State	Came to gold mine to make money because her family was very poor since her father died after he was taken as a porter by Burmese soldiers
S10	February 16, 2005	23	Shopkeeper	Nambyu gold mining area	Bhamo	Being seen as a sex worker by community after supporting family with money from boyfriend
S11	February 11, 2005	26	Student	Myitkyinna	Bhamo	Working at Namhkam gold mine area as a cook, but becoming a sex worker later
S12	February 12, 2005	23	Student	Myitkyina	Machyangbaw Putao	Lost virginity to boyfriend and shunned by villagers. Stopped schooling and went to gold mine area; became a sex worker
S13	March 22, 2005	21	Student	Laiza	Danai	Used to be a cook in gold mining areas and became professional sex worker. She moved out to Laiza because prostitution was banned by gold mining leaders.
S14	March 22, 2005	27	Student	Laiza	Putao	Raped by SPDC soldier; shunned by villagers; came to work in a beauty and massage parlour in gold mining area
S15	February 20, 2005	23	Sex worker	Nambyu gold mining area	Nyaung Thaw Bhamo	Since her family is very poor and couldn't make ends meet, became sex worker in gold mine area
S16	February 20, 2005	21	Sex worker	Nambyu gold mining area	Kap Maw Hpa Kant	Poverty leading to becoming a sex worker in gold mine area

No	No Date of Interview	Age	Occupation	Interview Place	Address	Subject
S17	S17 March 3, 2005	26	Sex worker	Danai	Danai	She got married at early age and separated from her husband. Since she needed money to support her son she became sex worker
S18	S18 March 28, 2005	23	Student	Myitkyina	Aungnan Myitkyina	After working as a cook for some time in Danai gold mining areas with inefficient wages, she decided to become a sex worker
S19	S19 February 10, 26 2005	26	Sex worker	Myitkyina	Myitkyina	Tricked into prostitution on the way to gold mining area; forced to have abortions; HIV positive

The remote and environmentally rich Hugawng valley in Burma's northern Kachin State has been internationally recognized as one of the world's hotspots of biodiversity. The military junta ruling Burma, together with the US-based Wildlife Conservation Society, is establishing the world's largest tiger reserve in the valley. However, the conditions of the people living there have not received attention. *Valley of Darkness* reveals the untold story of how the junta's militarization and self-serving expansion of the gold mining industry have devastated communities and ravaged the valley's forests and waterways.



