



Capitalizing on Conflict

**How Logging and Mining Contribute to Environmental
Destruction in Burma**

A report by

EarthRights International with

Karen Environmental & Social Action Network

October 2003

Capitalizing on Conflict

How Logging and Mining Contribute to Environmental Destruction in Burma

A report by

EarthRights International with

Karen Environmental & Social Action Network

October 2003

Free reproduction rights with citation to the original

EarthRights International (ERI)

EarthRights International (ERI) is a non-governmental, non-profit organization combining the power of the law and the power of the people to protect earth rights. Earth rights are those rights that demonstrate the connection between human well-being and a sound environment, and include the right to a healthy environment, the right to speak out and act to protect the environment, and the right to participate in development decisions. ERI is at the forefront of efforts to link the human rights and environmental movements.

For more information on ERI, visit www.earthrights.org

Karen Environmental and Social Action Network (KESAN)

The Karen Environmental and Social Action Network (KESAN) was formed in 2001 by Karen activists from different organizations who shared a common interest in addressing the problems their communities face. KESAN is the first local, non-profit organization to specifically focus on the relationship between social and environmental issues, and does so in a way that reflects Karen priorities. Currently, KESAN works closely with grassroots communities to promote the participatory management of local resources using traditional wisdom, experience, and institutions. Special attention is focused on finding sustainable solutions for Karen communities, especially those which have been marginalized by the conflict inside Burma. Additionally, KESAN works to encourage mutual understanding between local communities and policy makers.

For more information on KESAN, write kesan@access.inet.co.th

Research and Writing Team

Mahn Nay Myo, Shwe Maung and Ken MacLean with special assistance from the Karen Environmental and Social Action Network (KESAN).

Ken MacLean was the author of this report.

Acknowledgements

We would like to thank all the individuals who provided the logistical support and information that form the basis of this report. Due to legitimate fear of reprisal, they cannot be named here.

We would also like to thank The Rockefeller Brothers Fund, the Open Society Institute: Burma Project, and Oxfam America for their generous support.

Finally, the author would like to thank KESAN, Shwe Maung, Tyler Giannini, Jackie Foley, Masao Imamura, Kenny Bruno, Ann Putnam, David Corson-Knowles, and Steve Thompson for their helpful comments and suggestions on earlier drafts of this report.

Cover Photo

A truck from the Htoo Company races hardwood logs to the point of sale in Shwe Gin Township, Burma.

Security is EarthRights International's first priority. Since people willing to speak out about human rights abuses in Burma put themselves at considerable risk, identifying information has been redacted and all interviewees will remain anonymous. Additionally, this information has been compiled into field documents which are organized by date and location to further protect our informants. All the information included in this report is on file with ERI. Redacted versions can be made available upon request. Contact infoasia@earthrights.org for more information.

Table of Contents

Map of Burma	4
Map of Logging and Mining Areas	5
Executive Summary	6
Recommendations	8
Part I: Context	13
General Background on Cease-fires	14
Conflict Trade and Burma	15
Part II: Logging Case Study	23
Background on the Conflict	24
Shwe Gin Township (Pegu Division)	27
Papun Districut (Karen State)	31
Reported Socio-Economic and Environmental Impacts	34
Part III: Mining Case Study	45
Background on the Conflict	46
Mogok (Mandalay Division)	47
Shwe Gin Township (Pegu Division)	54
Reported Socio-Economic and Environmental Impacts	55
Conclusion	61
Featured Terms and Acronyms	64
Endnotes	66

Map of Burma



Areas of Logging and Mining Covered in the Report



Executive Summary

Capitalizing on Conflict presents information illustrating how trade in timber, gems, and gold is financing violent conflict, including widespread and gross human rights abuses, in Burma. Although trade in these “conflict goods” accounts for a small percentage of the total global trade, it severely compromises human security and undermines socio-economic development, not only in Burma, but throughout the region.

Ironically, cease-fire agreements signed between the late 1980s and early 1990s have dramatically expanded the area where businesses operate. While many observers have drawn attention to the political ramifications of these cease-fires, little attention has been focused on the economic ramifications. These cease-fires, used strategically by the military regime to end fighting in some areas and foment intra-ethnic conflict in others and weaken the unity of opposition groups, have had a net effect of increasing violence in some areas.

Capitalizing on Conflict focuses on two zones where logging and mining are both widespread and the damage from these activities is severe (see maps).ⁱ Both case studies highlight the dilemmas cease-fire arrangements often pose for the local communities, which frequently find themselves caught between powerful and conflicting military and business interests. The information provides insights into the conditions that compel local communities to participate in the unsustainable exploitation of their own local resources, even though they know they are destroying the very ecosystems they depend upon to maintain their way of life. The other alternative—to stand aside and let outsiders do it and then be left with nothing—is equally unpalatable.

These case studies are classic illustrations of the interdependence and indivisibility of human rights, protection of the environment, peace and sustainable development.¹ A host of abuses, from lack of participation of local communities to loss of livelihood and violence, are responsible for the deterioration of the environment and traditional cultural practices. The conflict—or lack of peace—only exacerbates these problems

ⁱ The core of the report is based on recent fact-finding trips to these cease-fire and conflict zones by staff from EarthRights International’s Burma Project and the Karen Environmental and Social Action Network (KESAN). This new field data, based on field surveys and in-depth interviews, provides a detailed portrait of how the dynamics of the conflict serve to create unusual business partnerships.

and reinforces the downward spiral of suffering in the areas examined.

The first case study focuses on the logging being conducted on the border between eastern Pegu Division and Western Karen State. This area is part of the Kayah-Karen montane region and contains the largest, relatively intact bloc of tropical and sub-tropical moist broadleaf forests remaining in the Indochinese eco-region. The combined Kayah-Karen montane and Tenasserim moist forests regions have been classified by the World Wildlife Fund, one of the world's most respected environmental organizations, as a "Global 200 Eco-region" due to its extremely high levels of biodiversity. Logging and the conversion of cleared areas to agriculture pose the most significant threats to this area, as does soil erosion from large-scale clear-cutting. Development pressures, especially dam and highway construction are also a growing problem.² Over the past two decades, fighting in this area has been severe and it still continues sporadically today. The history of this particular conflict has had important consequences for shaping how the logging industry and other secondary businesses which are dependent upon it have developed in Shwe Gin Township and Papun District respectively. The case analyzes both areas and outlines the main similarities and differences between them.

The second conflict zone unexpectedly links Mogok, in Mandalay Division, with Shwe Gin Township, in Pegu Division. Again, cease-fire agreements have enabled the military regime to enter into a variety of business relationships. In the process, mining activities around Mogok, which is internationally known for its "pigeon's blood" rubies and sapphires, have grown considerably in size and scope. Small-scale miners and gem traders, many of whom have worked in the area for generations, have been pushed to the margins as a result. A significant number of them have opted to relocate to Shwe Gin where they are now gaining control of the gold mining operations that are located there. Sadly, this in-migration of ethnic Shans and Chinese is creating the same types of conflicts in Shwe Gin among the local Karen population that occurred in Mogok.

Each case study begins with a brief overview of the conflict zone. This is followed by a comparative discussion of how the logging and mining activities are organized at the *local* level in these different areas as well as how they have changed over time. Finally, a summary of the impacts these activities have had on the environment and the human rights situation will be presented around each resource.

Recommendations

In the absence of significant political and institutional reforms, an end to the problems described in this report is unlikely. However, the following recommendations outline the main areas which need to be addressed and, where possible, specify what domestic and international mechanisms can be used to induce constructive changes. We recommend:

To the State Peace and Development Council (SPDC) and Other Armed Groups

Human Rights Issues

General

- The SPDC begin demilitarizing this area which poses no strategic threat to the integrity or unity of the country and demobilizing child soldiers (combatants under fifteen years of age) serving in the military. Similarly, all armed “cease-fire” and opposition groups should also take significant and verifiable steps to do the same.
- The SPDC take steps to prevent its military units from confiscating farmland and other private property without due process or acceptable compensation.
- The SPDC provide sufficient food, salaries, and other material supplies to its military units to remove the need to extort them from local villagers. Military and other official personnel found guilty of extortion should be prosecuted. Other armed parties should also refrain from extorting money or materials from local villagers.
- The SPDC prosecute military and other official personnel accused of committing human rights abuses. Among other things, this will require the creation of new mechanisms to better ensure the safety of those filing complaints.
- The SPDC sign and ratify following international human rights documents, including: the International Covenant on Civil and Political Rights (ICCPR) and its Optional Protocols; the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD); the Convention Against Torture and Other Cruel, Inhuman, or Degrading Treatment (CAT); the Geneva Convention (the Protection of Civilian Persons in Times of War and its Additional Protocol); and the Rome Statute of the International Criminal Court. Other armed parties should also adhere to these principles.

Forced Labor

- The SPDC proactively enforce Order No. 1/99 (14 May 1999) and the Order Supplementing Order No. 1/99 (27 October 2000), which outlawed the use of forced labor in *all* circumstances. Further, violators, including military personnel and local authorities, should be prosecuted under section 374 of the Penal Code and other relevant statutes. These prosecutions should be public and carried out by civilian courts. Those who make threats of retaliation or actually retaliate against those speaking out against forced labor should be criminally prosecuted.
- The SPDC fulfill its obligations under International Labour Organization Convention No. 29 (1930), which it ratified in 1955. Additionally, the SPDC should ratify International Labour Organization Convention No. 105 (1957) and implement the terms of this agreement immediately.

Environmental Issues

General

- The SPDC replace outdated laws and replace ineffective environmental provisions to bring them into accordance with its 1994 Environmental Policy and the UN-supported national action plan for the environment known as “Myanmar Agenda 21.”
- The SPDC strengthen the National Commission for Environmental Affairs (NCEA) by empowering it to enforce existing laws and other regulations regarding environmental issues. Additionally, the NCEA should be provided with sufficient human and financial resources to accomplish this task.
- The SPDC reform the system for administering and enforcing environmental laws, which is currently organized along sectoral lines and is highly inefficient. In most cases, the laws are concerned with licensing requirements (by ministry) and refer to environmental protection in vague terms where they are mentioned at all.
- The SPDC revise and enforce penalties for violating environmental laws. Fines and other deterrents should be adjusted to account for the differences in comparative wealth of individuals, Burmese companies, and foreign companies in order to avoid situations where it is more cost-effective to damage the environment instead of preventing the harm in the first place.
- The SPDC offer financial and other incentives to state-owned enterprises and private sector actors to sustainably manage the country’s natural resources.

- Other armed parties strengthen their efforts to sustainably manage the environment as well as refrain from the wholesale sell-off of resources in their areas and the practice of known unsustainable activities such as clear-cutting.

Logging

- The SPDC implement its 1995 Forest Policy, which was based on Burma's 1992 Forest Law, the forest principles adopted at the 1992 UN Conference on the Environment and Development (UNCED), and other international forestry obligations. This policy includes taking steps to ensure the sustainable development of forest resources while conserving flora and fauna, as well as enhancing the traditional way of life for indigenous peoples who rely upon them.
- The SPDC ban and take immediate legal action against private sector actors engaged in the clear-cutting of forests as it violates the terms of the 1995 Forest Policy.
- The SPDC create an independent monitoring agency to determine whether the Myanmar Timber Enterprise (MTE), presently the sole agency responsible for the harvesting and export of teak and other tropical hardwoods, is doing so at sustainable rates. Similar oversight should be exercised over the joint-venture agreements the MTE has made with different private sector companies engaged in "forest concession" development.

Mining

- The SPDC ban and take immediate legal action against individuals and companies using ecologically damaging techniques, such as: 1) hydraulic mining, a practice that has been outlawed throughout the world; 2) "deep trenching," which involves cutting deep trenches across the farmland; as well as 3) the indiscriminate use of mercury, cyanide, sulphuric acid, and other chemicals to leach precious metals and minerals from extracted ore.
- The SPDC enforce Section 12(a) of SLORC Law No. 8/95 which contains language requiring that: a) all applications to the Ministry of Mines conduct an environmental impact assessment (EIA) prior to receiving official approval to extract minerals, gems, and precious metals; and b) the Myanmar Gems Trading Corporation investigate whether the environment, flora and fauna, highways, religious property, and/or items of cultural heritage would be negatively affected by mining activities. Laws and regulations in both these areas should be strengthened.
- The SPDC create an independent agency to conduct future social impact assessments and environmental impact assessments in order to avoid conflicts of interest.

- The SPDC repeal the section of the SLORC Law No. 8/94 (Myanmar Mines Law of 1994) which states that no mining company is liable to prosecution or fines.
- The SPDC promulgate laws that permit citizens whose health and/or livelihoods are harmed by mining activities, including downstream pollution, to file lawsuits and receive adequate compensation for their injuries.
- The SPDC create specific laws for governing water pollution. The general provision in Section 3 of the Public Health Law of 1972 and the guidelines issued by the Myanmar Investment Commission in June 1994 are inadequate to address the pollution problems caused by mining operations and other heavy industries.

Governments

- Governments demand that Daw Aung San Suu Kyi be released from “protective custody” so that she may resume her normal activities as head of the political opposition.
- Governments encourage the SPDC to unilaterally declare a cease-fire against all groups and begin demilitarizing areas inhabited by non-Burman ethnic nationalities.
- Governments maintain existing economic sanctions and continue to withhold international aid to the regime until significant improvements in the human rights situation is independently verified by the UN Special Rapporteur on the human rights situation in Myanmar and other monitoring groups. Incentives should be offered to reward changes in this direction.
- Governments continue to pressure the SPDC to engage in meaningful and substantive discussions with the National League for Democracy and representatives of the country’s many non-Burman ethnic nationalities. Incentives should be offered to reward changes in this direction.

International Organizations and NGOs

- The International Labour Organization (ILO) strengthen existing resolutions on Burma to require the ILO’s constituents (governments, employers, and labor unions) to take concrete actions to eliminate trade and assistance with the regime that is contributing to the practice of forced labor.
- UN agencies and other international environmental organizations abstain from providing funding or other technical forms of assistance until serious steps are taken by the SPDC towards meeting its existing international treaty obligations regarding the environment.

- Civil society groups, in concert with governments, and the timber and gem industries establish minimum acceptable international standards for certifying trade in teak and precious stones (especially rubies) from Burma in order to curb the flow of these conflict goods to regional and international markets.
- The Asia-Pacific Center for Environmental Law and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) should pressure the SPDC to honor the terms of “Myanmar Agenda 21,” which they helped author.
- NGOs develop the capacity of indigenous groups to document abuses and advocate for change in relevant regional and international forums.

Private Sector Actors

- Private sector actors involved in logging and mining activities inside Burma take steps to adopt sustainable practices.
- Major importers and distributors of teak and other tropical hardwoods eliminate their tacit support of the SDPC by refusing to import these timber products from Burma or otherwise purchase them through third countries, as well as smuggled and illegal shipments.
- Major importers and distributors of gold and gems (especially rubies) eliminate their tacit support of the SDPC by refusing to import these products from Burma or otherwise purchase them through third countries, as well as smuggled and illegal shipments.

Multi-Lateral International Initiative

- Governments, international organizations and INGOs, and private sector actors (including those involved in producing, processing, importing, exporting, and selling) take steps to create a practical certification scheme, similar to the Kimberley Process used for rough diamonds, in order to reduce the conflict trade surrounding the above commodities.



Part I: The Context

General Background

Cease-fires and the Conflict Trade in Burma

General Background on Cease-Fires

The Burmese military (*Tatmadaw*) first experimented in the early 1960s with a strategy of providing different kinds of economic concessions and incentives to armed groups that signed cease-fire agreements with them. In exchange, these local militia groups, known in Burmese as the *Ka Kwe Ye* or “home guards,” were allowed to continue to fight against their rivals and to pursue their own economic activities, which frequently included opium production, logging, mining, and taxing cross-border trade.³ In 1989, a mutiny by the Wa and Kokang, two ethnic groups which constituted the core of the Communist Party of Burma’s fighting force, caused it to suddenly collapse. In an unexpected move, the State Law and Order Restoration Council (SLORC), the military regime then ruling Burma (1988-1997), negotiated a cease-fire agreement with these two groups at the initiative of then Major-General Khin Nyunt.⁴ Since the Communist Party of Burma’s demise, the SLORC individually pursued cease-fire agreements with different armed groups, most of them organized along ethnic lines. In 1997, the SLORC was reorganized and changed its name to the State Peace and Development Council (SPDC). By this point, twenty-three groups had either surrendered or entered into different cease-fire agreements with the military regime.⁵ Nearly two dozen armed opposition groups, however, are still active in pockets around the country’s remote border regions, the two largest being the Shan State Army South (SSA-S) and the Karen National Liberation Army (KNLA).⁶

Most of the cease-fire groups were allowed to retain their weapons, control some territory, and in some cases actually receive business concessions from Rangoon. In recent years, several of these cease-fire groups, most notably the United Wa State Army (UWSA) and Democratic Kayin Buddhist Army (DKBA), have become significant fighting forces in their own right and frequently act as proxies for the regime. Other groups, such as the Kachin Independence Organization (KIO) and the New Mon State Party (NMSP) have sought to carry out a more difficult balancing act: continuing their demands for regional autonomy while granting favorable business deals to the same powerful interests which allow them to manage their own affairs. These cease-fires did not constitute political agreements, however. Subsequent efforts by some cease-fire groups to conduct political negotiations with the SPDC have been completely unsuccessful and many of the issues which drove the insurgencies in the first place remain unresolved.⁷ The re-arrest of Daw Aung San Suu Kyi in May 2003 following the violent aftermath of “Black Friday” has sent a powerful signal that this situation is extremely unlikely to change in the near future.⁸

Additionally, all of the nineteen regional army commanders were made members of the SLORC in September 1988, immediately following the violent suppression of unarmed pro-democracy demonstrators in Rangoon and other major urban areas around the country one month earlier.⁹ This shift, which granted substantial political and economic power to each of the military commanders, is of relevance because it granted them the authority to oversee the state-owned enterprises operating in their designated region.¹⁰ It also gave the commanders the freedom to implement infrastructure projects on their own, which was one of the driving forces behind the routinization of forced labor in rural areas.¹¹ While this change came at the expense of the ministries in Rangoon, it helped secure the political loyalties of these regional commanders, who were later re-posted to the capital in 1992 where they were promoted to full cabinet ministers.¹²

Another outgrowth of this reorganization was the strengthening of business ties between high-ranking officials, *Tatmadaw* units in the field, cease-fire groups, private businessmen, and in some cases, armed opposition groups. This topic will be discussed in greater detail below.

Conflict Trade and Burma

In recent years, there has been growing concern over the role that “conflict trade” plays in sustaining certain violent struggles and, in extreme cases, the collapse of states. Perhaps the most widely publicized example has been the trade in the so-called “blood diamonds” of West Africa, which have funded brutal wars in Angola, Sierra Leone, Liberia, and the Democratic Republic of the Congo over the past two decades.¹³ In such situations, conflict trade is generally defined as the import and/or export of non-military goods to finance or otherwise maintain local war economies. In most cases, conflict trade is organized around the exchange of valuable natural resources and drugs, but it may also involve human and animal trafficking as well as technology transfer. Additionally, the systems put in place to financially exploit such trade, such as taxation, protection rackets, concessions, and other forms of rent extraction are of central importance since they offer insights into the wide array of government and private-sector actors involved in perpetuating the violence.¹⁴ Understanding the complex links between local and non-local actors involved in such trade is both the first step and key challenge to developing constructive solutions to prevent similar conflicts as well as resolve existing ones.

Decades of mismanagement and violent conflict have transformed Burma from one of the wealthiest countries in Asia to one of its poorest, a distinction it achieved in

1987 when the United Nations declared Burma to be a ‘Least Developed Country.’¹⁵ In such a context, it is hardly surprising that much of the revenue from mining (gems, gold, minerals), logging, oil and natural gas, and drugs (opium, heroin, methamphetamine, and amphetamine-type stimulants) have not brought prosperity and development to the peoples of Burma. Instead, a substantial percentage of the profits derived from selling these natural resources, often to foreign interests, has helped fuel the ongoing violence.¹⁶ Although many armed groups were and remain intimately involved in conflict trade, the *Tatmadaw* remains the clearest and most troubling example.

The violent crackdown on the popular movement for democracy in August 1988 left thousands of people dead in the streets of Burma. The scale and severity of the violence prompted the United States and the European Union to impose a range of economic sanctions on the State Law and Order Council (SLORC), the military regime then ruling Burma. At that time, foreign aid from West Germany, Japan, and the United States provided approximately 90% of Burma’s foreign exchange income. Foreign exchange reserves dropped from US\$ 20 million in July 1988 to \$US 10 million in December of that same year.¹⁷ These sanctions prohibited most forms of bilateral aid to the country and sharply restricted the regime’s access to multi-lateral development assistance as well. Japan also temporarily suspended bilateral aid to Burma. With the Burmese economy already on the verge of collapse, the SLORC quickly moved to promulgate a new Foreign Investment Law (November 1988) in order to attract the foreign exchange it desperately needed to maintain control. Among other things, the law opened the door to joint ventures with foreign companies interested in exploiting Burma’s natural resources.¹⁸

The infusion of hard currency these agreements provided help fund one of the largest military build-ups Southeast Asia has ever witnessed. Since 1988, the Burmese military has more than doubled its size from 180,000 troops to approximately between 400,000-450,000 today.¹⁹ Analysts also estimate that the *Tatmadaw* has spent at least US\$1.2 billion on arms from China alone and possibly more than US\$2 billion in total during the past decade, though reliable figures are notoriously difficult to determine as barter deals and funds derived from heroin sales have allegedly been used to finance this build-up.²⁰ To frame these statistics another way, the regime, which faces no external military threats, has spent 264% more on its military than it did on the health and education of its citizens *combined* between 1990-1997. Only a few countries in the world have a worse ratio, among them: Iraq and Syria.²¹ From this perspective, the cease-fire agreements the *Tatmadaw* signed with most of the armed groups of any military significance during this period would appear to have relatively little to do with finding a peaceful means to resolve

the conflict or with rebuilding the country. Instead, they appear to have everything to do with gaining some measure of control over these valuable commodities.²² Three additional issues compound the problem of conflict trade in the Burmese context: 1) land tenure problems; 2) forced labor; and 3) extortion.

Land Tenure Problems

The lack of secure land tenure in Burma is one of the key factors contributing to conflict trade. Sections 9-12 of the 1953 Agricultural Lands Act restricted the right of landowners to transfer, partition, or lease land by requiring that they obtain permission from government authorities. The 1963 Tenancy Act later removed the right to lease land entirely. The 1963 Protection of the Right to Cultivation Act further eroded ownership rights by permitting confiscation in two instances: a) non-payment of dues owed to the state, and b) disputes arising from inheritance cases *or actions taken by the State for security reasons* [emphasis added]. On the 18th of September 1978, the State granted itself further authority to confiscate land with Notification No. 4/78. This notification permits officials at the village and township levels to seize land in cases where cultivators have failed either to plant crops in such as way a to optimize agricultural yields or satisfy their annual crop quotas at the official stipulated price (although recent reforms have removed most of these burdens).²³ In practice, however, the regime routinely seizes land it believes to be useful for commercial or infrastructure projects, especially road-building and capital-intensive forms of agro-business. Since security concerns can also be invoked to summarily seize such land, the regime is not obligated to pay any compensation. Currently, there is no neutral arbitration or other legal process to resolve disputes concerning these Acts and Notifications.²⁴

Forced Labor

Due to the high costs of maintaining such a large military and Burma's deteriorating economic situation, the SPDC has instituted a general policy of economic "self-reliance" in 1996-1997, which has forced the *Tatmadaw* as well as the police and other administrative officials to be as self-sufficient as possible.ⁱ This policy was

ⁱ This economic policy dates to 1962. However, several recent events have reinforced its political importance. In 1996-97, many foreign governments renewed and/or strengthened their sanctions on the military regime. Additionally, the Asian currency crisis sharply reduced inflows of capital to Burma, both in terms of overseas development assistance and foreign direct investment. See International Crisis Group, *Myanmar: The Military Regime's View of the World* (Bangkok: ICG, 2001), 5-6; International Labour Organization, *Developments Concerning the Question of the Observance by the Government of Myanmar of the Forced Labour Convention, 1930 (No. 29): Report of the High-Level Team (HLT)*, (Geneva: ILO, 2001), 14-15.

primarily intended to encourage these three groups to cultivate food to feed themselves. In practice, however, the widespread use of forced labor, which the International Labor Organization (ILO) has described as a contemporary form of slavery, has become the key means by which military and other authorities extort what they need from local populations.²⁵

Although forced labor takes a variety of forms in Burma—the ILO has identified seven main categories—its effects are quite similar: severe physical and emotional damage due to heavy workloads, lack of time to rest, and insufficient food. Torture, rape, beatings, and extra-judicial executions are all commonly associated with the use of forced labor as well.²⁶ Less obviously, forced labor appropriates the time and energy people would normally pursue to grow their own food, earn additional income, attend school, or otherwise engage in important cultural and religious activities. Over time, the use of forced labor by the military and other cease-fire organizations erodes the ability of people to provide for themselves. In many instances, they have no other choice but to flee the area. Although some people relocate to other parts of the country or urban areas where the demands for forced labor are noticeably lower, most become internally displaced persons (IDPs) or refugees.

Extortion

Finally, the use of fees and permits to extort money continues to increase and now represents a serious threat to people's livelihoods and, in many cases, the right to food by undermining the food security of subsistence farmers. Local SPDC and cease-fire groups, for example, frequently require local people to purchase a "permit" which they suddenly need to farm their own fields, harvest timber and non-timber forest products, and/or carry out petty trade. In areas where there are potentially more lucrative natural resources (e.g. teak, gold, and gems), different "permits" are sold to entrepreneurs who wish to extract these resources irrespective of who is understood to legitimately own or control access to them. In exchange, the military units and cease-fire groups receive a percentage of the actual profits from their sale and other material benefits as well. Since local farmers generally do not possess official papers which prove their ownership rights, they routinely find themselves powerless to stop people with permits from destroying the ecosystems on which they depend for their survival. Given the current state of Burma's legal system, it is unlikely that proof of land use rights would actually be sufficient. If anything, there is evidence to suggest that complaints and legal action are likely only to provoke violent retribution.²⁷

Logging and Mining in Burma

At an analytical level, two main types of conflict trade can be distinguished. Type one involves violent conflict that is financed by the sale and taxation of a desired commodity, whereas type two consists of violence between competing actors over the control of the trade itself.²⁸ In Burma, both types occur, but with negative impacts at different levels. Type one conflicts, for example, involve the SPDC, cease-fire groups, and armed opposition groups who enter into joint-venture agreements with state-owned enterprises and private sector actors. In this instance, profits derived from the trade in particular goods (e.g. logs, rubies, and gold) are used to purchase weapons and munitions that are used in the broader conflict which has wracked the country for five decades. Type two conflicts, in contrast, generally affect individual households and other local businesses who are displaced by better organized, financed, and armed actors. This shift from small-scale to large-scale operations is driven, not just by changing market pressures, but by often extreme forms of violence. In the process, local livelihoods are undermined or destroyed completely and replaced by highly intensive and unsustainable forms of resource extraction.ⁱ Although the distinctions between both types of conflict trade often blur in reality, the many problems associated with them appear most clearly along the edges of Burma's many cease-fire zones where fighting still periodically occurs. In these areas, the two types of conflict trade in Burma have reinforced one another resulting in chronic patterns of gross human rights abuses and accelerated rates of environmental degradation.

The two case studies which follow below provide concrete examples of how the trade in conflict goods leads to earth rights abuses in Burma. The first examines logging along the border between Pegu Division and Karen State. The second analyzes the spill-over effects changes in the mining industry in eastern Mandalay Division are having in Pegu Division. After discussing the environmental impacts of these practices, the report will examine the patterns of human rights abuses which often accompany them.

This is not to suggest that all forms of natural resource exploitation in Burma automatically constitute conflict trade. Much of the economic activity in Burma goes unrecorded, making it extremely difficult to determine the extent to which

ⁱ Not all forms of "traditional" resource use are sustainable. However, limited access to capital and technology, especially heavy equipment, has effectively limited the amount of damage these smaller operations could achieve.

profits from the conflict trade contribute to the broader conflict itself. According to some observers, the extra-legal economy is considered to be several times larger than Burma's official economy. Additionally, trade data is further distorted by the over-reporting of exports to hide money-laundering and drug smuggling, the under-reporting of imports to avoid customs duties, and an artificial exchange rate that makes valuing what data does exist a questionable enterprise. To cite just one example, the Myanmar Central Statistical Office (CSO) declared that 806,000 m³ of timber was exported in 2000. By contrast, data from other countries shows that a total of 1.72 million cubic meters (m³) was imported from Burma during that same year, more than double what the CSO officially acknowledged. 2001 figures show a similar pattern, with Burma claiming to have exported 688,000 m³, while records from China alone indicate Burmese imports totaled 850,000 m³.²⁹ Despite the problems in obtaining accurate data, it is difficult to conclude that the regime would have survived without trading in conflict goods given Burma's recent history.

Some persuasive evidence exists to suggest that this conclusion is correct even when the discussion is narrowed to include only the logging and mining industries. After the military coup in 1962, the rate at which teak was harvested promptly doubled. Between 1970 and 1990, the amount of teak produced exceeded the Ministry of Forestry's annual allowable cut (measured in cubic meters) by fifteen percent on average over this two decade period. In some border areas, timber production may have exceeded the limit by as much as twenty-six percent during the 1980s.³⁰ In late 1988, for example, the SLORC signed more than forty timber concessions worth \$112 million per year with Thai companies, many of whom had close connections to local Thai military interests.³¹ By the early 1990s, timber sales were approaching US\$200 million annually,³² which helped fund the *Tatmadaw's* rapid expansion and arm its troops with light arms from China and, most recently, MiG fighters from Russia.³³

Non-state actors have also granted concessions to foreign interests, sometimes in cooperation with the SLORC/SPDC and, in other instances, independent of the military regime. The KIO has repeatedly insisted that its cease-fire arrangement with the SLORC, signed in 1994, was not a "business deal," but quickly signed contracts with Chinese companies who were heavily involved in the logging and jade industries shortly afterwards. The secrecy surrounding these negotiations and the very visible impacts these concessions have had on the environment appears to be a source of conflict within the Kachin community.³⁴ In fact, in 2001, young officers in the KIO carried out a bloodless coup that removed the top three leaders of the organization. These officers justified their actions by claiming it was part of a broader effort to make the organization less hierarchical and more democratic.³⁵

The KNU has reportedly used the funds obtained from logging agreements with Thai and Malaysian companies to obtain weapons and ammunition to resist the regime as well as to maintain good relationships with local Thai military units based just across the border.³⁶

The figures for the mining industry are more ambiguous, in part because gems stones and precious metals are far easier to conceal and transport illegally across borders than are logs. Additionally, anecdotal evidence suggests that a significant percentage of the rubies and sapphires marketed in Thailand actually originate from elsewhere. For example, during the 1980s and early 1990s, the Pailin area of Cambodia, which was then under Khmer Rouge control, was a key source for obtaining these gems as local deposits in Chantaburi and Trat Provinces in Thailand had been exhausted. Since then, gems from Burma (and Vietnam) have become increasingly important. In both cases, the stones are typically sold as Thai stones.³⁷ Without a certification scheme in place, determining the size of the illegal border trade in gems remains extremely difficult. Structurally, however, the economic relationships are quite similar. By law, investors are required to enter into profit- and/or production-sharing agreements with the SPDC, one of the country’s six state-owned mining enterprises, and, in some cases, the regional military command.³⁸ Although the inflow of foreign direct investment (FDI) has fallen due to a number of factors—namely the regional currency crisis, consumer boycotts and trade sanctions, and the high levels of risk associated with conducting business with the regime—commercial mining remains one of the SPDC’s largest legal earners of foreign exchange. The mining industry has also averaged a growth rate of 20.92% between 1996-2001 in terms of Gross Domestic Product (GDP) by sector.³⁹ Both the logging and mining industries provide large income streams to the regime, a significant (if unknown) portion of which is used to purchase weapons and ammunition for use against its own citizens.

**Export Flows From Burma to Country of Destination,
2001 Figures (US\$ millions)⁴⁰**

Commodity	Thailand	USA	India	China	Singapore
Wood and Manufactured Wood Products	64.3	6.1	117.2	89.2	21.8
Pearls, Precious Stones, Metals, & Jewelry	1.0	3.7	0.1	3.7	1.1

Finally, the conflict trade in these two commodities has also played a key role in further dividing political opposition to the regime by financially rewarding certain groups at the expense of others.⁴¹ From this perspective, the political, military, and economic concerns driving the cease-fire agreements and the concessions which followed are significant. In recent years, however, these distinctions have become increasingly unclear as economic objectives have displaced political or ideological ones. The case studies which follow below offer information illustrating what forms these processes take at the local level.



Part II: Logging Case Study

**Background on the Conflict
Shwe Gin Township (Pegu Division)
Papun District (Karen State)
Reported Impacts**

Background on the Conflict

The SPDC has frequently used cease-fire agreements in some regions to achieve what it could not do on its own. To take one prominent example, a Buddhist monk named U Thuzana formed the DKBA in December 1994 with the open help and support of the SLORC.⁴² The Democratic Kayin Buddhist Organization, the political wing of the DKBA, was also created but is subservient to the military. According to independent research conducted by the Karen Human Rights Group (KHRG), SLORC battalions operating in the region had devoted considerable energy towards splitting the KNU along sectarian lines for much of the previous year. After four decades of civil war, a number of serious grievances had emerged, including: the relatively high living standards of the KNU leadership; the lack of opportunity for Karen Buddhists to advance within the KNU political hierarchy which is predominantly Christian; and the failure of the KNU to make any significant progress towards ending the violent conflict which had begun in January 1949, one year after Burma gained its independence. The inability of the KNU leadership to defuse these issues made the promises of the DKBA to end the war very attractive. Hundreds of KNLA soldiers, the military wing of the KNU, soon defected and many villages shifted their support to the new group.

To assist the newly formed DKBA, SLORC battalions provided them with weapons, ammunition, uniforms, and political statements which were distributed throughout the area. Despite this effort, the DKBA remained too weak to defeat the KNU directly and assume control of the region by itself. Instead, a strategy of attrition was adopted where Karen soldiers who refused to join the DKBA were either forcibly disarmed or executed. As outlying KNU military positions gradually fell, SLORC forces quickly moved in and assumed control. Although DKBA troops primarily acted as guides and/or provided military intelligence to the *Tatmadaw* during this initial period, the SLORC continued to state that these victories were due to the strength of the DKBA as a fighting force. The annual offensive to take Manerplaw, the site of KNU headquarters on the Moei River between Thailand and Burma, intensified sharply in 1994. Between November 1994 and February 1995 the violent conflict widened, and gross human rights violations were committed against the Karen civilian population by SLORC, DKBA, and KNU troops.⁴³ Manerplaw was finally overrun by DKBA and SLORC forces in March of 1995.

Since the fall of Manerplaw, the alliance between the SLORC and the DKBA has deteriorated. Disputes between the two have resulted in a reduction of food rations from the *Tatmadaw* to the DKBA, which has forced the latter to extort and steal food from the surrounding villages. DKBA officials who disagreed with SLORC

directives have reportedly been removed and, in some cases, executed. Additionally, SLORC patrols routinely shadowed DKBA units and countermanded their orders. Not surprisingly, these actions have generated serious tensions in the relationship. More significantly, they have undermined what popular support once existed for the DKBA. Currently, according to the KHRG, the DKBA is little more than a 2,000-3,000 man militia carrying out *Tatmadaw* orders, and the DKBA's troops now largely consist of forcibly conscripted villagers.⁴⁴

In reality, however, the situation is more serious. The DKBA leadership appears to no longer have any clear political objectives. Although DKBA has units throughout Karen State and its troops periodically continue to fight alongside regular *Tatmadaw* army columns, it must find its own way to fund and feed itself. Typically, this entails DKBA troops extorting food and money from villagers at road checkpoints, collecting taxes on logging and mining activities, as well as controlling transportation services in the region.⁴⁵ More seriously, there are credible reports that the DKBA is now actively involved in drug trafficking (especially methamphetamines). According to these reports, the United Wa State Army (UWSA) has, with the approval and support of the SPDC's MI-25 (a military intelligence unit), shifted some of its production laboratories to areas controlled by the DKBA, near Mae Sot, Thailand. The drugs are allegedly smuggled across the border, hidden in shipments of timber and agricultural produce, or carried by human "mules."⁴⁶

At its peak, the KNU/KNLA had more than 10,000 soldiers and an additional 5,000 militia men under its command and controlled large areas of Karen State, the Tenasserim Division, and parts of eastern Pegu Division. However, the rise of the DKBA and the fall of Manerplaw seriously weakened the KNU/KNLA. The SPDC and the DKBA also carried out a series of major offensives against the remaining KNU/KNLA strongholds during 1997, particularly in southern Karen State and the Tenasserim Division. These offensives were successful and, from this point on, the KNU/KNLA were reduced to a guerrilla force of between 3,000-5,000 soldiers. Currently, it only exercises significant *de facto* control over some small areas in the Tenasserim Division and the Papun hills of northern Karen State.⁴⁷ Pitched battles remain common in this area and the widespread use of forced recruitment means that a significant proportion of the men and boys in this area have been forced to fight for both the KNLA and the DKBA at different points in their lives. Additionally, forced labor for the military and portering during the annual dry season offensives against the KNU/KNLA remain widespread.ⁱ

ⁱ ERI Field Document #5 (2003).

Both Shwe Gin Township and Papun District have been badly affected by the conflict. Although the townships are located in two separate administrative zones—Pegu Division and Karen State respectively—they are separated only by a short distance and, in many ways, their stories are remarkably similar. From 1975 to 1982, the area around Shwe Gin Township was targeted by the military regime for its infamous “Four Cuts” (*Pya Ley Pya*) operations, an anti-insurgency technique intended to cut the links between civilians and anti-Rangoon resistance groups by stopping the flow of food, money, intelligence information, and recruits. Entire communities were forced to leave their ancestral lands and relocate to Burmese army-controlled relocation sites without any compensation.⁴⁸ Shortly after relocation, unharvested crops were destroyed. Existing food stores were confiscated and then re-issued in the form of rations. Homes were burned. “Free-fire” zones were also established which permitted Burmese army troops to shoot civilians on sight if they violated curfew.⁴⁹ The violence transformed countless thousands of people into “internally displaced persons” (IDPs), and thousands more into refugees. 43 villages, all within five miles upstream of a planned dam site on Shwe Gin River (see below), were forcibly moved to a relocation site near the seat of the Township during this period.ⁱ By the mid-1980s, the situation had stabilized somewhat, and most people returned home to resume their lives. A dry-season offensive against the KNU/KNLA in 1988, however, prompted people to flee again and these villages were completely destroyed. Most of these villages are still empty today.ⁱⁱ

Having consolidated their positions in eastern Pegu Division, SLORC battalions intensified their efforts to gain further territory by moving east towards the western border of Karen State during the early 1990s. Papun District, which is strategically located in the middle of Karen State along the banks of the Yunzalin (Pholoh Klo) River, quickly became a fiercely contested zone.ⁱⁱⁱ In 1993, SLORC began forcing rural communities into “key villages,” much like it had done in Shwe Gin a half-decade earlier. From that point on, Papun District has been subject to regular dry-

ⁱ The villages were: Teneype, Wameikyo, Thae Pa Day, Sue Mu Tha, Po Lo, Bu Paw, Ka Hsaw Wa Kwi, Nyamu Kwi, Htee Thu Hta, Ler Wah, Ko Ka Loe, Maw Tha Mei Ser, Balw Loe Klo, Ler Klaw Hta, Pray Maw Kee, Mae Si Kee, Sae Bu Lay, Der Wee Kho, Saw Thae Kee, Hsaw Au Hta, Ta Say Der, Kaw Kee, Aswa Oo Kee, Baw Tu, Tadwee Kho, Htee Klay Kee, Baw Hsee Hta, Htee Bla Hta, Htee Let Hta, Saw Ther Hta, Doe Po Hta, Mae Ro Kee, Day Pgaw Hke, Thay La Kaw Kee, Ma Yaw Kho, Tal La Tho, Tha Day Pu, Kho Pae Kee, Htee Nya Hte, Htee Waw Kee, Ti Ri Kyo, Htee Pa Nwe, Nwe Lah Mae Kee. ERI Field Document #1 (2002).

ⁱⁱ ERI Field Document #1 (2002) and ERI Interview #035 (2002).

ⁱⁱⁱ Papun District is also widely known as Mu Traw District (Karen). It consists of Loo Thaw, Bu Tho, and Dweh Lo Townships, which contain a combined total of thirty-four village tracts. ERI Field Document #3 (2003).

season offensives by the SLORC and the DKBA.

Various human rights fact-finding groups have repeatedly documented the extensive use of forced labor by military units operating in the area as well as serious human rights abuses as the civilian population often finds itself caught between the conflicting demands of the KNU/KNLA, the military regimes in Rangoon, and the DKBA. Due to this situation, a significant proportion of the population has left.⁵⁰ While it is not possible to precisely determine the number of IDPs and assess their living conditions because of the ongoing conflict, figures suggest Karen State as a whole has between 190,000-200,000 IDPs, of which around 37,000 are located in Papun District.⁵¹ By contrast, Pegu Division is thought to have approximately 10,500 IDPs.⁵² The difference between these two figures illustrates how severe the levels of violence still are in front-line areas.

Shwe Gin Township (Pegu Division)

Despite the intensity of the armed conflict, the State Timber Board (later renamed the Myanmar Timber Enterprise (MTE)) was able to continue logging in Pegu Division from 1968-1977. It was only during the height of the violence (1977-1985), when the SLORC was using the “Four Cuts” strategy throughout the region, that large-scale logging temporarily ceased. In 1986, several companies owned by Shwe Ye Win, Oo Mya Kyaw, and Yin Ma resumed cutting teak and other valuable hardwoods. In 1997, the Htoo Company, directed by Oo Tin Zat, began logging the eastern part of the Division, near the border with Karen State.ⁱ Since then, the rate of deforestation has accelerated markedly, largely due to the activities surrounding a proposed hydro-electric dam near Kyaut Nagar on the Shwe Gin River as well as the logging concessions elsewhere in the Township.ⁱⁱ New roads have also been built to facilitate both activities, and this has contributed to the intensification of other petty businesses that depend upon trees in some manner, especially sawdust and charcoal production. Other non-timber forest products, namely bamboo and rattan, are also now being harvested at unsustainable rates. Together, these activities pose a considerable threat to the integrity of the local watersheds and the health of the arable land dependent upon them.

ⁱ KESAN, *Thulei Kawwei* (Karen Environmental Forum), Interview #3 (May-October 2002), 25.

ⁱⁱ According to local sources, the dam is to be built where two mountains named Mo So Kho and Ter Ther Kho (Se Le Taung) narrow the river channel considerably. ERI Field Document #1 (2002).

According to local sources, the hydro-electric dam is to be built with technical assistance from an undisclosed Japanese company.ⁱ The project was approved by U Aung Than of the SPDC's Energy Department, while U Sern Htin is the official in charge at the site itself. Security is being provided by SPDC IB #57, LIB #349, and LIB #350.ⁱⁱ Since surveying and construction activities began in 2001, significant numbers of trees have been used to construct buildings around the proposed dam site, including: the strategic command headquarters at the base of the Mo So Kho mountain on the east side of the river, military barracks housing the troops, and several surveillance posts on the west side of the river.

Approximately 200 fruit orchards line the Shwe Gin River, and a substantial number of them specialize in growing *Shaut*, a popular type of lemon-lime. Over 3,000 acres of *Shaut* trees are estimated to be cultivated upstream from the dam site. Each fruit sells for between 30-50 *Kyat* in Burma's cities, which makes it a key source of income for local villagers.ⁱⁱⁱ Betel-nut, durian, and rubber are also widely cultivated in the area. All the remaining *Shaut* and other fruit trees in the flood zone upstream (between Kyuat Nagar and Sumuhte) are to be cut down in 2003 prior to inundating the area according to local SPDC officials.^{iv} To date, however, no official plan for regulating how this large-scale clear-cutting is to occur has been announced.

Local villagers also report that widespread logging unrelated to the dam is occurring throughout the Township. In 1997, the Forestry Department in Pegu Division announced plans that each of its townships was to produce ten thousand tons of

ⁱ Unless noted, all information in this section is based on ERI Field Document #2 (2003).

ⁱⁱ *Tatmadaw* battalions typically consist of four to five companies. Although some function as permanent garrisons, battalions in front-line areas, especially light infantry battalions (LIB), have an offensive role and play a key part in the military regime's counter-insurgency efforts. While some officers are permanently stationed at the headquarters camp, most of the soldiers (in platoon or company-sized groups) are stationed at battalion outposts (i.e. "camps") and/or patrol remote areas for extended periods of time. For a summary, see Human Rights Watch, *My Gun Was As Tall As Me* (New York: HRW, 2002), 19-20.

ⁱⁱⁱ In late July, President Bush signed the Burmese Freedom and Democracy Act of 2003 (S 1215/HR 2330) into law. The Act, which applies unilateral trade sanctions against the regime for its continuing refusal to release Daw Aung San Suu Kyi from "protective custody," is already having a dramatic impact on Burma's economy. Since then, the price of gold has already risen from 17,000 *Kyat* (US\$154) to 20,000 *Kyat* per 15.3 grams (1 *kyat thar*). The exchange rate for dollars on the black market has also risen from 900 to 1,100 *Kyat* per US\$ 1. The figures used in this report, however, are based on the pre-sanction exchange rates.

^{iv} A Buddhist temple in Tnaype Village will be flooded as well. ERI Field Document #1 (2002).

wood per year. For budgetary reasons, however, the Forestry Department was unable to carry out these activities themselves, a situation which required them to make arrangements with the MTE, a state-owned enterprise,⁵³ the Htoo Company, and wealthy local businessmen who could organize the labor, elephants, and trucks needed for such an undertaking.

Next, a series of meetings were held between the parties responsible for the actual logging and the local office of the Forestry Department. After an initial agreement was reached, the terms were reviewed by the head of the Forestry Department for Pegu Division. Final permission was then secured from General Tin Aye (Division #66) along with Muang Ni, who heads the SPDC LIB #4 under Division #66, and Po Baing, a prominent local businessman of Indian descent.⁵⁴ According to local sources, their personal permission is also needed for the gold mining which occurs in the township (see below). In this particular instance, the companies were required to sell 35% of their logs to the SPDC at official rates. After that they were free to sell the remainder to whomever they wanted.

Additional arrangements also had to be made with the armed groups operating in the area, including: SPDC battalions under Division #66, the DKBA, as well as *Tha Ka Sa Pa*, a locally based Karen group that opposes the KNU's resistance struggle. In exchange for their security guarantees, the MTE and business companies had to constantly provide a range of supplies to these units, including: food, money, medicine, clothing, shoes, watches, and dry-cell batteries. They additionally had to pay the costs of ceremonies to welcome new military units to the area.

Since local SPDC officials limited cash withdrawals from the bank to between 80,000 and 100,000 *Kyat* per week, the loggers were faced with a difficult choice: meet the extortion demands of the military units for material goods and supplies or cover their own operating costs. As a compromise, the laborers hired to cut and transport the logs were forced to work as quickly as possible in order to minimize these additional costs. This strategy had three main consequences: 1) indiscriminate cutting which results in many immature trees being logged; 2) damage to the logs stemming from the use of less sophisticated cutting techniques; and 3) wastage which can reach as high as sixty-percent of the total volume. These practices not only tend to result in the clear-cutting of entire areas, but they also dramatically reduced the actual saleable value of the logs as well.⁵⁵

Once the trees were cut, elephants typically dragged them to the nearest road where the logs were loaded onto trucks. In many instances, new "roads" were cut in order to gain access to stands of trees. Although Burmese teak (*Tectona grandis*)

and Pyinkado, a Burmese ironwood (*Xylia xylocarpa*) are the two most valuable species, several other commercially desirable ones are found locally, e.g: *Shorea Siamensis*, *Dipterocarpus tuberculatus*, *Shorea obtusa*, *Pterocarpus Indicus*, and *Gmelina arbiea*.

In cases where the SPDC directly hires the labor, the rates are as follows. Loggers receive 400 *Kyat*/day, while mahouts, who use their elephants to drag the logs to the nearest road earn 1,500 *Kyat*/day. Truck drivers, who transport the logs to holding sites in Pegu, Kyaiton, and Eng Ga Pu Townships, are paid 2,000 *Kyat*/ton. Businessmen from Mandalay and Rangoon, who travel out to these holding sites, currently pay approximately 20,000 *Kyat*/ton for teak and 15,000 *Kyat*/ton for ironwood.⁵⁶ The logs are later exported, often by the Htoo Company, to Thailand, Malaysia, China, South Korea, Japan, and elsewhere where they are typically sold at a mark-up of between ten and one thousand percent depending upon the location and the quality of the wood.ⁱ

The MTE and the major logging companies similarly sub-contract much of the labor connected to the logging concessions to others. The pay-rates for these workers similarly scaled. Tree-cutters are paid 700 *Kyat* per tree weighing over two tons. Mahouts, who control the elephants that drag the logs out, are paid 1,200 *Kyat* per ton. Truck drivers are paid 300 *Kyat* per ton/mile, with most trucks being capable of carrying of up to ten tons.

Both of these rates (even taking regional variation into account) are well below the market rates reported in neighboring Papun District: cutters receive 6,000 *Kyat* per ton of wood while mahouts earn 10,000 *Kyat* per ton.ⁱⁱ In addition, sub-contractors who arrange the labor are also required to pay various taxes, fees, and make other contributions to the local military units. As a result of these hidden costs of doing business with the MTE, the *Tatmadaw*, and other cease-fire groups, the sub-contractors face a decidedly narrow profit margin. One sub-contractor explained:

The major benefactors are companies and the MTE. They pay us quite low [in *Kyat*] whereas they earn US dollars on their exports. For us it is not favourable and even risky when we meet with the SPDC's front line soldiers. The Htoo

ⁱ KESAN, Interview #3, and Steve Thompson (*personal communication*, 20 September 2003).

ⁱⁱ ERI Field Document #5 (2002-2003).

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

According to the information gathered from local informants, the following individuals and representatives from the MTE are responsible for organizing the sub-contracting work around the following tasks: Oo Win Thet and Naw Eh Moo (overall logging in the area); Oo Ye Htut (loggers); Po Kwa Gyi (trucks); Oo Hla Myint (road building and maintenance); and Po Tha Kya (elephants). But after three decades of logging and charcoal production, there are comparatively few stands of large trees left in the Pegu Division. Estimates are that more than 265,758 acres (415.2 sq. miles) of forest have been destroyed in eastern Pegu alone.⁵⁷ As a consequence, logging companies have increasingly moved farther east into Papun District, close to front-line areas where fighting still occurs.

Papun District (Karen State)

Htoo Trading Company Ltd. is one of the largest businesses in Burma.ⁱⁱ In addition to logging, the company builds small dams for irrigation purposes and is heavily involved in the hotel and transportation industries. According to local sources, Ye Min Htut and Oo Saing, from the Htoo Company, successfully negotiated a deal with Oo Aung Poe, the head of the SPDC's Ministry of Forestry, to cut the teak trees located in the Mae Wei area of Papun District. Since the SPDC does not firmly control the entire area, the Htoo Company also had to reach an agreement with the KNU so that they could log without being attacked by its armed wing, the KNLA.

“If logging continues for five to six years, the place will be empty and nothing will grow there. We want to stop the logging, but we cannot because we do not have freedom or the right to self-determination.”⁵⁸

ⁱ KESAN via Simon Phillips of Global Witness (*personal communication*, email 15 July 2003).

ⁱⁱ Unless noted, all information in this section is based on ERI Field Document #3 (2003).

Local sources report that the KNU was reluctant to enter into this deal, but recognized that the company would seek other means to log the area if permission was denied. Additionally, extreme poverty—a direct consequence of the armed conflict—now drives many people to engage in logging. In this area, hillsides are steep and ridges can exceed 2,000 meters in elevation. Valley bottoms, while fertile, are very narrow, which sharply limits the numbers of people who can engage in lowland, wet-rice production. Instead, most of the local farmers use a form of rotational agriculture on the surrounding mountain slopes where different plots of land are cultivated for short period of time and then left fallow to replenish the soil. This technique is sustainable if population densities remain low and the land is left fallow for a sufficient period of time, normally six years.

Over the past two decades, however, the violent conflict has created a large population of IDPs in Karen State, now estimated to be between 190,000-200,000 people, of which around 40,000 are in Papun District.⁵⁹ In order to survive and earn sufficient income to pay their taxes to the armed groups in the area, many of the IDPs as well as people living in SPDC-controlled relocation sites have had to clear virgin forest and/or intensively cultivate existing plots that should have been left fallow.⁶⁰ These practices have significantly degraded the local environment and forced people to cultivate increasingly marginal lands and/or seek other ways to earn income, such as logging.

“I had to pay so many taxes that I had to start logging to survive.”⁶¹

Given these circumstances, the KNU has recognized that much of the forest would have been lost regardless as its previous efforts to stop logging—which have included arresting people for illegally cutting KNU-protected areas, the use of landmines to discourage encroachment, and the destruction of logging equipment.⁶² One KNU official explained:

Because of the SPDC, we could not control our forest... They drove the civilians from the towns into the jungle where they disobey the rule of the *Kaw Thoo Lei* [KNU] regional authority. If you kill them, it will turn the civilians against you. But if you don't, they will continue to come and cut the forest. No matter what you try to do to solve the problem, it will come back and bite you.⁶³

Despite these pressures, the KNU has sought to manage the pace and scope of the destruction in the hopes that something might be left for the future. In Papun District, for example, a four-person committee consisting of two representatives each from

the Htoo Company and the KNU was created in late 2001.ⁱ This committee is responsible for overseeing the logging in the zone which is not firmly controlled by SPDC at its fixed price, which is currently set at 1,500 *Kyat* per ton, well below market rates. Additionally, the Htoo Company would pay a substantial protection fee to the KNU for the logging conducted during this period (24 February-30 May, 2003). The total fee was largely based on taxes collected on the following:

KNU Tax Rates	Number Used (estimates)
50,000 <i>Kyat</i> per elephant	7-11 elephants
50,000 <i>Kyat</i> per truck (small)	1
150,000 <i>Kyat</i> per truck for transporting logs	30-42
50,000 <i>Kyat</i> per chainsaw	7-10
150,000 <i>Kyat</i> per bulldozer for road construction	1
150,000 <i>Kyat</i> per crane for loading logs (similar to a combination cable/hydraulic Prentice loader)	1
150,000 <i>Kyat</i> per front-end log loader truck (calipers permit it to lift and carry logs much like an elephant)	1
30,000-50,000 <i>Kyat</i> per ton of teak	6,000+ tons harvested

After meeting these requirements, the Htoo Company would be free to use the remaining two-thirds of the logs itself and/or export them to neighboring countries with one notable exception. If the logs were teak and had a circumference of over five feet, the Htoo Company was required to sell them directly to the MTE.ⁱⁱ

Shortly after this agreement was reached, the Htoo Company bought around 50 trucks to transport the teak back to its *Wah Ta Ya* division, located in Rangoon, which is responsible for processing and exporting timber. Additionally, the company bought bulldozers to cut roads, as well as water and specially modified logging

ⁱ According to local informants, the Htoo Company first sent representatives to Papun District in October 2000 to explore the possibility of logging the area. In early 2001, the Htoo Company directly approached the MTE and the KNU to obtain permission. A formal meeting between Htoo Company officials and representatives of the KNU was held in June 2001, but the KNU did not grant the logging concessions until several months later. The Htoo Company began road construction connected to these logging concessions in early 2002. KESAN (*personal communication*, August 2002).

ⁱⁱ KESAN, unpublished interview (2002), #3, no page.

trucks. Between September 2001 and April 2002, the Htoo Company logged an estimated 10,000 tons of teak and 2,000 tons of other hardwoods in the Mae Paw Hta area of Papun Township. The wood was then transported from Mae Wei to Bilin River and then to Kin Mo Camp. The company plans to cut a minimum of 20,000 tons of teak during 2003.

Reported Socio-Economic and Environmental Impacts

Forced Relocations

SPDC soldiers from the Operations Commanding Headquarters (*Sa Ka Ca*) #12 and DKBA Unit #777, led by officer Thaung Zin and General Kyaw Than respectively, forced people living in outlying villages to relocate to Mae Wei shortly before the logging began in March 1997. The villages included: Mae Kyi Hta, Shwe Htee, Kaw Wah, Mae Kaw Law, Ler Wah Kho, Kloe Kee, Day Law Pu, Wah Thoe Loe and Pway Day. The villagers were not given any time to gather their belongings before their homes were burnt to the ground. The officers in charge reportedly said that the villagers were being relocated in order to prevent communication between them and KNLA troops operating in the area. They were also informed that if they returned to the village to scavenge for things, they would be arrested or shot on the spot.

The influx of several thousand displaced villagers caused a severe food and housing shortage as well as public health problems in Mae Wei. Since there was not sufficient land available for farming, many of the new arrivals became day laborers for people who owned the existing fields in lowland areas. Others have gotten involved in some aspect of the logging industry. One of the most common income-generating activities involves “scavenging” left-over pieces of wood (i.e. “wastage” which is known as *pa ga chan* in Burmese) from areas that have just been logged for sale to timber factories. With the arrival of the MTE and other timber interests, porters who are forced to serve the local SPDC military units, are also now being used to carry out this task.ⁱ As a result, the exploitation of other less valuable timber and non-timber forest products has become increasingly important since 1996 (see below).ⁱⁱ They include the following: 1) charcoal production; 2) paper production; and 3) rattan harvesting.

ⁱ ERI Field Document #5 (2002-2003).

ⁱⁱ ERI Field Document #5 (2002-2003).

Charcoal Production

The large influx of military personnel and economic migrants to the region has also increased the demand for charcoal for cooking. Two different techniques are used in the region. Small-scale operations generally peel sections of tree bark and then grind them into sawdust. Some trees can survive having small amounts of its bark removed, but harvest rates are now thought to be unsustainable. Many people now scavenge the logging-sites to obtain bark as well. The sawdust is later mixed with water and other binding ingredients, then baked in the sun to create a cheap form of charcoal which is then used for cooking. One *Viss* (1.6 kg or 3.5 pounds) sells for 90 *Kyat*. Permission is now needed from the military to carry out this traditional trade, and it must be renewed weekly for a fee of 50 *Kyat*. The military reportedly taxes people who buy and/or sell sawdust as well. Larger-scale operations use earth- or brick-kilns to carbonize the wood. This higher quality charcoal—it burns hotter and more cleanly—is worth 80 *Kyat*/pound locally, but is worth 200 *Kyat*/pound in the townships. In Papun District there are estimated to be more than 135 sites where this type of charcoal is produced.

“If we do not burn charcoal, we will not be able to eat. But if we do burn the charcoal, it will effect the environment. When all the trees are gone, we do not know what we will do.”⁶⁴

Paper Production

Bamboo is a highly versatile grass that is also widely used to make paper. In 1996, the Sit Taung Paper Factory, which is located in Thein Zayat Village Tract, Kyaiton Township, began operations. Since then, it has paid local people, many of whom are extremely poor, from Payagyi, Pagu, Thein Zayat, and Kyaiton to cut down their stands of bamboo for which they receive 10 *Kyat* per one full-length of bamboo (a mature piece of bamboo is typically 20-30 feet long). To bring the bamboo to market, it is transported from the jungle to Thein Zayat and then to Kyaiton, a twelve-hour journey. After the bamboo arrives in Kyaiton, it is resold at a rate of 150 *Kyat* per length of bamboo, a substantial increase even after transportation costs are taken into account. Estimates place the total number of bamboo posts harvested per year to be over one million. In most cases, the villagers comb tracts of land which have just been logged. By the time they have completed cutting the bamboo, this land is completely bare.

Rattan Harvesting

Burma has twenty-seven different species of rattan. Decreasing natural forest cover (i.e. habitat loss), agricultural pressures including invasive species, and the exploitation of stems for the furniture industry represent the three largest threats to its continued

survival. The large-scale logging in the region is contributing to all three threats as new roads have dramatically improved the ability of people to extract rattan from the forest. Like the bamboo, it is harvested in the jungle outside Thein Zayat and then transported back to Kyaiton where it is used to make furniture and other goods. Again, there is a significant increase in price, from 80-120 *Kyat* to 300 *Kyat* per rattan (each length is approximately twelve feet long).

All of these materials are also heavily used to supply the various needs of the many military camps located in this conflict zone for housing, cooking, and self-defense (i.e. log-bunkers). Forced labor is commonly used to obtain these materials as well. A woman and man from Papun Township described their experiences in late 2002:

IB #36 asked our village to give 1,200 bamboo pieces, 90 posts, and 50 bundles of tied bamboo. We worked for two days. Twenty to thirty people went to cut and carried the materials to XXX military camp. . . . We were told that the reason for giving so many pieces of bamboo was to fix the military camp. But we heard that so many villages had to send materials, that if you combined all the materials together, you could build three more camps. Our village can never rest more than two weeks before we get another order for doing some kind of work.”ⁱ

In February (2003), the military office in XXX demanded 16,500 [roof] shingles and 2,000 lengths of bamboo for the military camp. We had to divide the work with the people in the village tract to do it. Some people made shingles and some bought them. We didn’t get any money for these things even though some of the villagers are very poor. They also asked for logs, but we didn’t give any because around the village tract there are not many good trees like the one’s they asked for.”ⁱⁱ

ⁱ ERI Field Document #5 (2002-2003).

ⁱⁱ *Ibid.*

Main Environmental Impactsⁱ

Local sources report that the extensive clear-cutting of forests around Shwe Gin Township and Papun District have led to a common patterns of problems, including:

Social Impacts

- Loss of farmland and gardens to logging activities (encroachment)
- Increased theft (food, clothing, animals, and consumer goods)
- Increased demands on local populations to provide food, alcohol, money, and other materials to local military units (especially LIB #40, headed by Win Myit)
- Discrimination against local Karen population by Burmese economic migrants
- Fear of reprisals for filing complaints
- Inability to pursue traditional economic activities due to new fees
- Seizure of property without compensation, especially private stands of teak
- Distrust of private companies due to their failure to support local education and health programs as promised

Environmental Degradation

- Severe soil erosion
- Landslides on the slopes surrounding the Oo Pu, Matama, and Kyopaku Rivers.
- The loss of arable land to landslides
- The loss of arable land to hungry elephants
- Biodiversity loss from increased rates of harvesting timber and non-timber forest products
- Biodiversity loss from poaching
- Biodiversity loss from the use of explosives and electricity (fishing)
- The fragmentation of habitat due to road construction for logging activities
- Local climate change as weather patterns have become hotter and drier
- The loss of seasonal streams, including the Mae Wei, Tha Haw Loe, Mae Kaw Loe, and Mae Nya Loe as groundcover had disappeared and temperatures have increased
- Increased levels of water pollution from oil and diesel fuels and elephant dung

ⁱ ERI Field Documents: #1 (2002); #2 (2003), #3 (2003).



Villagers in Papun District deliver roofing materials (shingles) they were forced to make to a nearby military camp

The influx of several thousand displaced villagers has caused a severe food and housing shortage as well as public health problems in Mae Wei. This young boy is looking for water.





Villagers tend the kiln while finished charcoal awaits packaging



Finished charcoal is loaded for transport in Shwe Gin



Teak forest in Papun District at risk of logging



Day-laborer felling a mature tree



A log being delivered for transport to market



Day laborers struggle to make a living working for outside logging interests



Elephants, guided by mahouts, drag logs to a loading site



Piles of logs await transport as the crane stands ready



Logs awaiting transport to Rangoon





A front-loader deliver logs to a truck



Two men working a back-loading crane



Part III: Mining Case Study

Background on the Conflict

Mogok (Mandalay Division)

Shwe Gin Township (Pegu Division)

Reported Impacts

Burma is justifiably famous for its rich deposits of gemstones which include rubies, sapphires, and jade.⁶⁵ The town of Mogok, which is located in the eastern corner of Mandalay Division along the Shan State border, has been the center for ruby and sapphire mining for eight-hundred years.⁶⁶ Due to the richness of its gem and mineral deposits, various outside groups have always sought to control the area. The mining enterprises operating in Mogok were first taken over by British interests in 1888. They were later nationalized in 1962 following the military coup headed by General Ne Win.⁶⁷ Until comparatively recently, however, these enterprises were relatively small-scale and caused limited damage to the surrounding environment. Since 1989, there has been a major shift towards large-scale mining operations which has transformed the industry.

The rapid rise of non-local actors, capital, and equipment have also accelerated the ecological devastation of the region.⁶⁸ Between 1989-1992, modern mining equipment caused extensive damage, especially around Mogok and Mineshu. In the process, local businessmen have been displaced by increased competition and corruption. They now find themselves working as poorly paid laborers for outside business interests. Another effect has been the gradual migration of workers and small businessmen from Mogok to mining areas in Shwe Gin, Pegu Division. In this new context, many of the people pushed from Mogok to find themselves to be comparatively well-off and, because of their experience and capital, able to displace local Karen businessmen and farmers in much the same way as they themselves experienced. The section below describes the organization of the gem mining and trading in Mogok and examines the forces which have prompted many of the small businessmen and workers originally from the region to leave.¹

Background on the Conflict

Between 1962-1988, a number of armed insurgent groups fought against the *Tatmadaw* and each other in the effort to gain control of Shan State's valuable natural resources. In terms of military strength, the most important of these groups were the Shan State Army (SSA), the Pa-O National Organisation (PNO) and the Communist Party of Burma (CPB). This situation changed rapidly in April 1989 when internal conflicts within the CPB, which had approximately 15,000 men under arms, caused it to collapse. The CPB's former troops quickly reformed into four regional, ethnically-distinct armies controlling parts of Shan State: the UWSA, the

¹ Unless otherwise cited, all information below is contained in ERI Field Document #4 (2002-03).

Myanmar National Democratic Alliance Army (MNDA), the National Democratic Alliance Army-Eastern Shan State, and the New Democratic Army (NDA). As part of the cease-fire agreements brokered by Major-General Khin Nyunt, the leaders of these various ethnic armies were awarded, among other things, logging concessions and received saws and milling machinery.⁶⁹ For much of the next decade, the Shan State was engulfed in war, as the competing armies fought for dominance. Logging and mining activities as well as drug production and trafficking played a key role in funding these violent conflicts, while generating a range of political and economic benefits to the successive military regimes in Rangoon (SLORC/SPDC) and the transnational networks of ethnic Chinese businessmen involved in trading these valuable commodities.⁷⁰

In January 1996, the Shan Mong Tai Army (MTA), under the leadership of the notorious “drug lord” Khun Sa, finally surrendered to the SLORC. Shortly afterwards, the SLORC launched a massive relocation program in central Shan State to deny the newly-formed Shan State Army-South civilian support. The Wa, who were backed by the UWSA’s 20,000 troops, were also encouraged by the SLORC to move into southern part of the State where they began encroaching upon land traditionally occupied by the Shan. Over the next several years, approximately 128,000 Wa moved into the area, while 300,000 Shan villagers from 1,400 villages were forced from their homes by *Tatmadaw* or UWSA troops. Most villagers were forced into relocation sites, became IDPs, or fled to Thailand.⁷¹ Wealthy businessmen, many of them of ethnically mixed Shan and Chinese-descent, also fled the rapidly intensifying conflict in upper Burma, with some of the resettling in the Pegu Division.

Mogok (Mandalay Division)

According to local informants, the SLORC first began inviting Chinese and Indian companies to engage in mining operations around Mogok in 1994. These invitations were made possible by a half-dozen cease-fire agreements with armed groups representing the Kokang, Wa, Palaung, and several different Shan factions between 1989 and 1995.⁷² With the security situation vastly improved, the SLORC then approved the Myanmar Gems Law, also known as SLORC Law No. 8/95 (1995), which formally permitted private companies to enter into joint ventures with the regime to mine for precious stones. Previously, all mining activities had been carried out by the state.⁷³ Currently, these joint-venture agreements control an estimated 100 mining sites around Mogok and allegedly give half of their profits to the military regime. The Myanmar Economic Holding Limited Company,⁷⁴ one of Burma’s largest

state-owned corporations is active in the region, especially around Nya Yan Inn and Lin Youn Chee Gyin.

Additionally, many of the cease-fire groups have also developed their own mines as an alternate source of income to finance their activities. The United Wa State Army (UWSA), for example, reportedly controls ten to twenty mining areas, while the Northern Shan State Army has around twenty. Other ethnic groups, like the Ko Khang, Lisu, and Kaw Ta Kar also have around twenty mines.

Many of these actors possess substantial capital and mining equipment relative to the local families which have mined the area for generations. In the face of increased costs and competition, many of the Mogok natives are finding it impossible to compete. One local businessman explained, “Ten years ago if you had four million *Kyat* and your own garden or house, you could have a good business in Mogok. You could rent the equipment and hire the people for work. Now, with the current situation, if you have two-three hundred million *Kyat* it is nothing.”ⁱ In addition to inflation, other methods are rapidly transforming the local population into poorly paid laborers working for outside business and military interests as well.

Large scale mining around Mogok is primarily located in two zones. The first includes southern Mai Shu, Lu Po, Sai Linn Yun, Nam Saw Lin, and around the Nam Sue Chung River. The second includes the area around Baw Pa Run and Baw Ma villages. As outside investors have moved into this areas, their large-scale mining operations have increasingly displaced local people, whether they were involved in the mining industry or not. The main strategies and forces behind this process include the following:

Fees

The use of forced labor (*loh ah pay*) was widespread prior to 2000, especially for infrastructure projects such as the construction of the road from Bum Da to Pyauk Khon. Since then, its use had declined noticeably. The levying of arbitrary fees continues, however. As is common throughout much of Burma, military units regularly require households to contribute money to different “development funds” and/or join organizations. Each month, households are informed that they must give money to the United Nations Development Program, a women’s affairs committee, veteran’s organizations, and so on. In one instance, soldiers threw a SPDC calendar into an informant’s house and then demanded the next day that he pay for it. Around Mogok,

ⁱ ERI Field Document #4 (2003).

LIBs #417 and #418 routinely extort money in this fashion. In exchange, households receive membership cards which make it somewhat easier to move about town without having to pay additional fees on demand. Households and/or miners that fail to pay upon demand experience problems with military personnel later. Over time, these fees consume what little capital an average household was able to amass, making families extremely vulnerable to other crises, such as illness or accidents.

Permits

The Myanmar Gems Enterprise (MGE) is officially responsible for granting permits to parties who wish to engage in the mining of gems and jade as well as their final processing and manufacture into finished products. Without such a permit it is illegal to actually remove the jewels from the site where they are located. Although the permit process is designed as a safeguard to help regulate the trade, it is subject to regular abuse in Mogok. Given the large amount of money to be made, conflicts are inevitable. In some cases, the disputes are between government institutions. One Burman miner described the relationship between the MGE and the local SPDC Strategic Command Office as follows; “[They] are like husband and wife. If there is a disagreement, the strategic command will just take out the person from the MGE that disagrees. The personnel at MGE are always changing.”ⁱ

In other instances, corruption affects individuals with legitimate mining claims. According to informants, the MGE frequently colludes with the mining companies and the SPDC to put pressure on people who have discovered a potentially rich site, especially those who have used their homes and/or property as collateral to obtain a loan financing their exploratory mining. A Shan miner and gem trader explained:

My family found some good jewels. We went to MGE to get the permit so we could mine them. Since it was a good spot, the MGE made it very hard for us to get the permit and it took a long time. They will tell you they have to send your papers to Rangoon or something like that. In my case, they “lost” my papers altogether. When this happened, one rich Chinese businessman offered to buy the spot we had found. We knew that if we sold it we just had to use the money to pay back all our debt that we got while waiting for the permit. But we didn’t have a choice and sold the hole to him. In this way, the

ⁱ *Ibid.*

Chinese work with the MGE to get the good mines. This happened to many local families who never got the permit. In 1998, I sold my mining hole and I paid all the workers with the money. I kept some of the money and became a daily worker. I had to work in a big team. Daily workers only get 25 percent of the value of what we mine. We have to give 75 percent to the owner of the mine.ⁱ

A similar account was also related by a Burman gem trader:

During the 2001 rainy season, one Shan man named XXX wanted to form a mining cooperative, so he went to file a form with the MGE. They told him that he had to go to Rangoon to see Vice-Chairperson Major Win Myint. This man went back and forth to Rangoon for nearly a year visiting the Major, and he lost almost all of his money. His mining claim was sold to other people and then he didn't have any more work.ⁱⁱ

Others are not so fortunate, especially around Hoe Mai, Hso Bum, and Shone Ban. Many simply lose everything, including their homes, while waiting to receive permission from the MGE.

Land Seizures

Land seizures by the military occur in a variety of ways. All mining sites, for example, are subject to periodic surprise inspections by military intelligence officers who determine whether tax rates should be increased. If the site appears to hold a large deposit of gems, especially rubies, then the officer is empowered to claim the site for the military which may later auction a “permit” to a private company enabling it to mine the gems. One miner explained, “If you find a line of these [secondary quality] jewels in the ground, it is usually a sign that you can find bigger jewels. With these kind of jewels it is easy to get money. The military came and checked what we had and took over the place.”ⁱⁱⁱ

If the *Tatmadaw* battalion or division intends to develop an unoccupied site to generate income for themselves (the practice is called *Tak Taw* in Burmese) they

ⁱ *Ibid.*

ⁱⁱ *Ibid.*

ⁱⁱⁱ *Ibid.*

can simply plant a flag in the area which indicates that no one else is permitted to mine there. Around Mogok, soldiers from LIBs #417 and #418 are then posted to the site to prevent anyone else from approaching it. If the land is already occupied, military units have been known to simply begin excavating it with heavy equipment.

If a significant number of gems are found, the military will seize the entire property, including the owner's home who is then forcibly evicted without any compensation. Small open areas, which are used as seasonal gardens, are often seized in this same fashion as well.

In some cases, entire villages have been forcibly moved, again without compensation. During June-July 2001, 100 households in Bal Lone Gyi and 70 households in Bal Lone Lay were relocated by LIBs #417 and #418 to allow the Myanmar Economic Holdings Limited Company to assume control of the area. In both cases, the villagers had to pay the costs of their transportation to the new site. The villagers were denied permission to disassemble their old wooden homes and reconstruct them in the new location. A barbed wire fence was also built to prevent the villagers from harvesting food from their home gardens and fruit trees.

Other Pressures

Due to these mounting pressures, many people originally from Mogok can no longer mine on an independent basis and they have become daily or monthly workers for businesses run by outside interests. Day workers typically get to keep 25 percent of what they find. Although monthly workers are salaried and receive a comparatively generous average income of 8,000 *Kyat*, the high cost of living in Mogok easily consumes this amount. Not only is housing expensive, but there is very little agricultural land in Mogok so much of the food and other consumer goods come from Mandalay at considerable cost. Malnutrition is reputedly quite common. One Burman man, a former resident of Mogok, complained about how costly basic goods had become:

The only people who stay in Mogok now are the rich people, like company people. I couldn't stay in Mogok with prices so high. If I stayed here I wouldn't be able to support my family. Ordinary people can only buy rice, salt, and fish paste. Other things like coffee are not affordable."ⁱ

People working in mines during the rainy season regularly risk drowning from

ⁱ *Ibid.*

flash floods or the collapse of retaining walls. Workers who sort gems after they are removed from the ground must do so under the hot sun since much of the surrounding area has been clear-cut and is devoid of shade. Workers have also reported that breaks are rarely allowed and that they regularly face verbal and physical abuse from the soldiers who provide on-site security for the companies.

To discourage theft, company workers are also subject to daily body searches. Women are routinely subjected to thorough and time-consuming searches. While many people are angry about this harassment, they have not filed complaints since they fear losing their jobs if they do so.

“The Mogok area is so pretty looking on the outside with people selling jewels in the market, but underneath the people have so many problems. We Mogok people have to find other ways to make money.”ⁱ

Basic social services are also expensive. According to local informants, the hospitals are reserved for officials from the mining companies. Ordinary workers who become sick or injured must find some means of covering their own medical costs since they do not receive any benefits or compensation from the companies they work for. Medical care at health clinics is often refused to workers who cannot prove that they can pay the cost of treatment. Once accepted for treatment, workers then have to pay additional “fees” to the medical staff, who are also seeking to augment their meager state salaries. In most cases, workers have to borrow money from others using their land and/or house as collateral. In the event that they cannot pay back the loan, they are forced to sell their property, often at half of its market value.

Social problems, such as theft (especially of fruit and vegetables from private home gardens) and prostitution, are also said to be widespread.

There are also reports that the local police, in order to meet arrest quotas (approximately twenty per month) falsely charge local people with drug offenses and, in some cases, plant heroin, on them in order to solicit bribes. The bribes can be substantial, 500,000 *Kyat* to have the charges dropped and 1,000,000 *Kyat* to be released after sentencing. People unable to gather the amounts are generally sentenced to Mandalay Prison.ⁱⁱ

ⁱ *Ibid.*

ⁱⁱ This information was provided by a man who claims he was arrested in this manner. He was sentenced to eleven years in prison after being unable to pay the bribe. After serving

Given the high costs of living in Mogok, several coping strategies have emerged. To avoid having to work for the outside companies, many independent businessmen have pooled their resource and formed what effectively are mining cooperatives. Most of these cooperatives are organized along ethnic lines; there are Shan, Burman, Lisu, Palaung, and Kaw Ta Kar groups, for example. However, these cooperatives are still subject to the same pressures described above.

Others have elected to mine secretly in an attempt to avoid these problems. Military patrols, usually consisting of four to five cars, sweep the area once or twice a week looking for these illicit mining operations. If caught, it is possible to pay a 5,000 *Kyat* bribe to avoid going to jail. If they do not have sufficient funds, they will be forced to work (normally cleaning buildings owned by the SPDC or local police) and sleep at the jail until someone comes to pay for their release. Local informants claim that some people have remained in jail for years since they had no family in the area who can bribe the local military and police. If people are caught mining in a restricted area (i.e. a site claimed by the military), they will be sent to prison for three years.

Given these uncertain and often dangerous working conditions, it is hardly surprising that many of the small-scale miners and traders have chosen to relocate elsewhere. Two different migrants explained:

The people may own the land in Mogok, but we don't get any benefits. It's like the deer that has many fawns, but the tiger will always get them. Here, the tiger is the military. Mogok people don't want to stay anymore because of the conditions. The original Mogok people that were wealthy are no longer. Now, the only rich people in Mogok are not from Mogok.ⁱ

I came to Shwe Gin to do my business with my friends because it is freer in this area. Most people who come to work here are

four years of his sentence, he was “released” to serve as a “prisoner-porter” with 220 other inmates. He was informed that if he survived six months as a prisoner-porter, his sentence would be reduced. He later escaped and was rescued by Karenni soldiers after crossing the Salween River and walking for four days. See ERI Interview #002 (2003). His story is consistent with other accounts previously gathered by ERI. See ERI *We are Not Free To Work for Ourselves: Forced Labor and Other Human Rights Abuses in Burma (January 2002-May 2002)* <<http://www.earthrights.org/pubs/fl2002overview.html>> (2 July 2002).

ⁱ ERI Field Document #4 (2003).

from Mogok and Shan State. We were happy to come here and mine because we have to pay less tax than in Mogok. If the military column comes, we have to feed them pork, chicken, and other things. [But] they don't make any problems [since] we have a permit pass from the division to do gold mining here.ⁱ

Although the economic migrants from Mogok find life easier in Shwe Gin Township, their arrival has made things decidedly more difficult for the local population.

Shwe Gin Township (Pegu Division)

Gold was first discovered in the many rivers around Shwe Gin during the British colonial period (1886-1948) and the area has been mined by small-scale business operations and individuals in search of fortune ever since then.ⁱⁱ Eight rivers are known to contain gold in them—Shwe Gin, Matama, Oo Pu, Tinpa, Kyopaku, Maezi, Meala Pu, and Boekahta—but the armed conflict presently limits mining efforts to the first five rivers.

In 1997, the first economic migrants from Mogok began arriving in Shwe Gin. Shortly afterwards, they approached Maung Ni, who heads LIB #4 in Pegu Division, and Po Baing, influential local businessmen for permission to develop mining operations around Shwe Gin (see above). General Tin Aye, who is the commander for SPDC Division #66 was also consulted and granted official permission for the mining to proceed. Since reaching an agreement, growing numbers of ethnic Shan and Chinese have migrated from the Mogok region to Pegu Division to mine for gold, especially along the many rivers around Shwe Gin. Like the sudden influx of ethnic Burmans as part of the logging operations, this in-migration has also raised inter-ethnic tensions as the Shan and Chinese businessmen generally prefer to hire workers of a similar background rather than Karen from the local community.

According to local sources, Po Baing quickly capitalized on this influx and bought land, at a price of 200,000 *Kyat*/acre, from General Tin Aye, the commander for Division #66, shortly after permission was granted to expand the mining operations around Shwe Gin. Po Baing then rented the land at a price of 150,000 *Kyat*/machine/month. The machines include both hydraulic mining units and other heavy earth-moving equipment (e.g. bulldozers and back-hoes), some of which now

ⁱ *Ibid.*

ⁱⁱ Unless otherwise cited, all information in this section is from ERI Field Document #2 (2003).

reputedly cost up to one million *Kyat* per unit to purchase. There are now thought to be 100 mining units like these in use across Shwe Gin.ⁱ Additionally, those groups which have received permission to carry out mining activities on Po Baing's land have to provide food to the SPDC troops based in this area, LIB #57, which cost an additional 10,000 *Kyat*/month. Occasionally, troops from other SPDC battalions would visit the mining sites and the gold miners would have to make additional payments to avoid security problems. Further, business investors are also required to pay a fee of 1,000 *Kyat* per employee and an unspecific percentage of their total profits to the regional SPDC commander. Taxes are also levied on whatever gold is found. Currently, one *kyat thar* of "wet" gold (15.3 grams) sells for 70,000 *Kyat* whereas one "kyat thar" of "dry" is worth 90,000 *Kyat* in the Township. According to local sources, "wet" gold is heavier due to the moisture content and other impurities associated with hydraulic mining and other water-based extraction techniques. "Dry" gold refers to gold dust, flecks, and pieces that have been dried and cleaned of these impurities. The latter, as a result of these properties, commands a higher price. Labor costs, by contrast, are exceedingly low; on average, men are paid 400 *Kyat*/day and women 350 *Kyat*/day to carry out this work.ⁱⁱ

Reported Socio-Economic and Environmental Impacts

Not surprisingly, the influx of outsiders has caused a considerable increase in operating costs as mining supplies have become more expensive, making it progressively more difficult for local people to continue small-scale mining by hand themselves. In 2001, the Myanmar Electrical Power Enterprise (MEPE) also announced plans to construct a hydro-electric dam in the area. When completed in 2005, the catchment area for the dam will not only destroy the fruit orchards which line the banks of the Shwe Gin River, it will also submerge potentially lucrative deposits of gold. As a consequence, local villagers are confronted with a difficult choice, search for gold elsewhere as an independent miner or join a larger mining operation.

ⁱ The largest operations are said to be in the following locations: nineteen machines on the Shwe Gin River where the Su Mu River joins it, four machines at Ka Hsaw Wa Kwi, four machines at Shoe Kee, six machines at Yaw Mu, three machines at Noe Baw Pwa, two machines lower Kyait Tee Yo Pagoda, and two machines at Peo Loe Hta. It was also possible to verify the owners of the mining equipment at the following locations, respectively: Oo Pya and Oo Hla Thein at Shoe Kee; Kyaw Tin Soe, and Ma Aye Win at Yaw Mu. KESAN (*personal communication*, 3 August 2003).

ⁱⁱ KESAN (*personal communication*, 3 August 2003).

The risks independent miners face are very high. In most instances, when local *Tatmadaw* units learn where a new deposit has been found by independent miners, it seizes control of the area and then sells “permits” to the Shan and Chinese mining interests (although in some cases, the units extract the gold on their own). Sa La Don is one particularly well-known place in Shwe Gin Township where this has occurred. Local villagers, who previously depended on small-scale mining for their income, have been displaced and, without access to the necessary mining equipment, are now finding it extremely difficult to survive.

In more extreme cases, independent miners can find themselves caught between armed groups. In April 2003, for example, villagers began constructing 50 huts near the river a village located in Shwe Gin Township. The villagers had pooled their money to rent some basic mining equipment. The KNU, however, did not want people working in this contested area, so members of the KNLA’s Third Brigade burned down all the huts. The villagers fled, but did not return to their home village since they feared for their lives. A SPDC patrol, LIB #57 commanded by Zaw Tun, later found two people hiding in the forest nearby and accused them of supporting the KNU. A woman, whose name is withheld for security reasons, was kidnapped by the battalion and later raped by one of them. She was released afterwards. The other person later filed a complaint with the battalion commander, who gave this person one bag of paddy and 10,000 *Kyat* as “hush money” not to tell the officials at the Township Office. Another individual from the village was so upset by the way the incident was handled that he went to the Township Office, but the official he spoke with was allegedly uninterested in pursuing the matter further.ⁱ

Given the severity of these outcomes, many of the villagers opt to work for larger mining enterprises which are located in Shwe Gin, U Pos Chaung, and Ma Ta Ma. While less dangerous, working conditions are hardly ideal. Many informants complained that they are discriminated against and receive less pay than the ethnic Chinese or Shan workers.ⁱⁱ Local sources also report that special “cleaning” ponds have also been built in these areas. Workers are required to bathe in these ponds at the end of each day and the owner claims the gold dust and flakes which were previously stuck to their clothes, hair, and skin. The combined total collected in this manner can be as much as one-half to one *kyat thar* (15.3 grams) of additional gold per day to the owner.ⁱⁱⁱ

ⁱ ERI Field Document #5 (2003).

ⁱⁱ ERI Field Document #2 (2003).

ⁱⁱⁱ KESAN (*personal communication*, 3 August 2003).

Different types of mining equipment are used in both Mogok and Shwe Gin. Traditionally, local villagers either panned or used small sieves to find gold along the riverbeds. In other instances, miners simply dig a pit, place the conglomerate in a bag, and then carry it to a machine with moving screens of various diameters.⁷⁵ As the machine vibrates, the materials separate by size and the gold (dust, flakes, and nuggets) are removed by hand. Men earn 250 *Kyat*/day and women 200 *Kyat*/day for this work. This practice is still widely used in the following areas: Tagontaing, Shwegalay, Thawgyi, Winkalei, and Wei Gyi. Each site produces up to 1-2 *kyat thar*/day.

More recently gravity-fed, multi-level sluices with screens have been used. But with the arrival of the outside business interests, miners have begun using hydraulic gold mining. This highly destructive method uses diesel-powered pumps to force jets of pressurized water through a hose which is then aimed at a river bank or the side of a rocky outcropping. Under such pressure, large amounts of rock and earth are simply washed away. The gold-bearing sediments are then channelled through a large sluice which is typically lined with liquid mercury (quicksilver). The mercury captures the finer particles of gold through a chemical process known as amalgamation and they are later separated. The remaining mix of debris and polluted muds are washed downstream.⁷⁶ Since mercury is highly poisonous to people and animals, the practice has been banned in most places around the world. Currently, it is unknown whether these chemicals are being used in these two locations, although it is widely used elsewhere in Burma for gold mining.⁷⁷ In either case, the environmental damage has been severe (see photos).



Other Environmental Impacts¹

Local sources report that mining activities, especially the use of hydraulic mining, around Mogok and Shwe Gin Township have led to a common pattern of problems, including:

- The collapse of river beds due to the removal of silt and soils from banks of the river, the base of trees and walls.
- Increased levels of soil erosion
- Increased levels of sediment
- Reduced fish stocks due to changes in water temperature
- Increased water pollution from mining tailings (i.e. the finely ground up materials left after the desired ore or mineral removed)
- Increased water pollution from “slurry” or acid mine drainage (i.e. the mixture of tailings, water, and chemicals, usually cyanide or mercury)
- Increased water pollution due to diesel fuels and oils leaking from the pumps and other mining equipment
- The loss of freshwater sources, such as small creeks, from over-pumping
- The destruction of arable fields due to “deep trenching” and indiscriminate use of heavy equipment (e.g. bulldozers and heavy equipment).
- Increased use of timber to construct sluices and reinforce underground tunnels
- Increased used of non-timber forest products (e.g. bamboo and rattan).

¹ERI Field Documents: #1 (2002); #2 (2003); #3 (2003).



Villagers panning for gold on a stream in Shwe Gin



An independent miner cares for her child while seeking gold in Shwe Gin



A gravity-fed, multi-level sluice



Day laborers search the sluice for gold



Villagers remove rocks from the river in search of ore

Conclusion

This report has explored the various ways the extraction and sale of tropical hardwoods, rubies, and gold help finance local war economies in Burma. The first case study focused on changes in the logging industry in eastern Burma. Although parts of the Pegu Division have been heavily logged for decades, it was not until the mid-1990s that the MTE and private sector actors were able to dramatically expand their operations, first in Shwe Gin Township, and then into parts of Papun District in Karen State. Several factors made this possible.

First, the internal conflicts within the KNU/KNLA led to the emergence of the DKBA, which factionalized the Karen community and created strategic military opportunities for the SPDC. The military cooperation between the SPDC and the DKBA significantly undermined the ability of the KNU/KNLA to continue to fight against Rangoon.

Second, the SPDC has dramatically expanded the amount of territory, formerly held by the KNU/KNLA, under its control since 1995. State-owned enterprises and, in particular, private sector actors have capitalized on this development by moving into this former war zone and negotiating logging (and mining) concessions with local military commanders of the SPDC, the DKBA and, in some cases, the KNU/KNLA. Currently, logging concerns are now working around the edges of front-line areas, in the forested hills of Papun District, where pitched battles still occur.

Third, many ordinary Karens are facing desperate living conditions after nearly five decades of civil war. An estimated 200,000 Karens in this region are classified as internally displaced people (IDPs). Due to the ongoing conflict, a significant but unknown number of these IDPs have to engage in environmentally destructive agricultural practices, such as “slash and burn” cultivation methods, instead of their traditionally more sustainable rotational techniques in order to grow food to feed themselves and their families. Many of these same people have to harvest timber (e.g. hardwoods and charcoal) and/or non-timber forest products (e.g. bamboo and rattan) at unsustainable rates in order to earn enough money to purchase food and other necessities. These three factors have contributed to large scale clear-cutting in many areas and a range of other environmental problems which stem from this practice.

The second case study uncovered surprising links between two mining regions. Until comparatively recently, mining enterprises in Mogok in Mandalay Division

were relatively small-scale and caused limited damage to the surrounding environment. Since 1989, there has been a major shift towards large scale mining operations which has transformed the industry. The rapid rise of non-local actors, capital, and equipment have also accelerated the ecological devastation of that region. In the process, local businessmen and miners (mainly ethnic Shan and Chinese) have been displaced by increased competition, inflation, and corruption. Some now work as poorly paid laborers for outside business interests, while others have left Mogok in search of opportunities elsewhere. Over the past decade, a growing number of these people have settled in Shwe Gin in Pegu Division, where their past experience and connections have enabled them to gain significant influence over the gold mining enterprises operating in the surrounding region. In the process, many local Karen miners and farmers have experienced the same social, economic, and environmental problems that prompted these entrepreneurs to leave Mogok in the first place.

The evidence gathered from the field and presented in this report underscores the following conclusions:

The trade in conflict goods significantly contributes to the ongoing problem of earth rights abuses in Burma. Among other things, the proliferation of cease-fire agreements has dramatically expanded the territory firmly controlled by the *Tatmadaw*, especially in border areas where many of the conflict goods discussed in this report are located. As a direct consequence, formal and informal business interests (representing both the state- and private-sectors) are now able to extract these natural resources in areas that were previously largely off limits because of the ongoing conflict. In the process, different armed actors have been able to sell and/or tax logs, rubies, and gold to these business interests in order to help finance their violent struggle against one another. The negative effects of the armed conflict on civilian populations in Burma are both well-known and well-documented.

Less obviously, the joint-ventures, concessions, and other types of arrangements described in this report are also helping to undermine people's livelihoods in three inter-related ways. First, the shift from small-scale to large-scale extractive industries is economically displacing many individuals and local businessmen primarily through increased levels of competition, inflation, and corruption. As a result, many local actors are finding themselves "priced" out of the market which leaves them a difficult choice: either leave or become a poorly paid laborer for these outside interests.

Second, there is considerable evidence that the expansion of these industries is not

noticeably reducing the frequency and type of human rights abuses regularly associated with the military regime and its proxies. If anything, the cease-fire agreements have actually made this entrenched problem more pervasive and difficult to eradicate by helping to obscure the involvement of military personnel. The use of forced labor remains widespread in the areas discussed in this study and is, in many instances, directly related to resource extraction. Local sources report that they are regularly required to porter for the *Tatmadaw* and/or the DKBA, construct roads and buildings for the SPDC, deliver messages, serve on village militias, and so on. Land seizures, especially in mining areas, are widespread. The forced payment of fees is also commonplace. Villagers regularly have to contribute money in order to avoid having to provide forced labor (especially portering), carry out everyday activities, and/or harvest timber and non-timber products that were previously freely available. Incidents of violent assault, rape, torture and extra-legal forms of military conscription connected to these abuses have also been reported in the area.ⁱ

Third, the expansion of intensive forms of resource extraction is, in most cases, unsustainable. The logging and mining activities described in this report are occurring in a context where there is no regulatory oversight. As a result, actors involved in both of these sectors can operate with little fear of facing fines or other penalties for the damage caused by clear-cutting, indiscriminate road-building, hydraulic mining, “deep trenching,” explosives, and other highly destructive techniques. Without laws that would permit a Burmese citizen whose health and/or livelihood have been harmed by such activities to file lawsuits to stop them and/or seek compensation for their injuries, there is little incentive for anyone to change their behavior. More centrally, given Burma’s poverty rates, especially in the country’s border regions, most people have little choice. Simply, people in these parts of Burma are caught between powerful military and business interests. With few viable alternatives, many communities feel compelled to participate in the unsustainable exploitation of their own local natural resources even though they know they are destroying the very ecosystems they need for their own survival. The other alternative—to stand aside and let outsiders exhaust the resources while leaving the villagers with nothing in return—is not an attractive one. Given these conditions, it is not surprising that many local people have adopted a fatalistic attitude. As one Karen villager put it: “We live in their hands. If they kill us we will die. If they keep us alive, we will live.”ⁱⁱ

ⁱ ERI Field Documents: #1 (2002); #2 (2003); #3 (2003); #4 (2003); #5 (2003); #6 (2002-2003). A new ERI report specifically focused on these human rights violations is forthcoming.

ⁱⁱ KESAN (*personal communication*, 3 August 2003).

Featured Terms and Acronyms

Administrative Units

- States* Administrative divisions where ethnic non-Burmans predominate. There are seven in total: Shan, Kachin, Chin, Rakhine, Karenni, Kayin, and Mon.
- Divisions* Administrative divisions where ethnic Burmans predominate. There are seven in total: Rangoon, Irrawaddy, Pegu, Magwe, Mandalay, Mandalay, and Tenasserim.

Each State and Division is sub-divided into the following smaller units:

- Districts* Include several townships (number varies)
- Townships* Includes a town and its wards, the surrounding area, and neighboring village-tracts
- Village-Tracts* Includes a group or cluster of neighboring villages
- Villages* Includes a group or cluster of homes

Political Acronyms

- NLD* National League for Democracy, the main political opposition
- SLORC* State Law and Order Restoration Council, (1988-1997)
- SPDC* State Peace and Development Council, (1997-present)

Administrative Levels

- DPDC* District-level Peace and Development Council
- TPDC* Township-level Peace and Development Council
- VPDC* Village-tract level Peace and Development Council

Military Units (SLORC/SPDC)

- Tatmadaw* Collective term for Burma's armed forces (includes army, navy, airforce, police, and militias, but the army dominates).
- Company* Usually 100 soldiers, though often much less
- Column* Combination of Companies assembled for operations, usually 100-300 soldiers
- Camp* Army base or outpost; from remote hill posts of ten soldiers to Battalion headquarters camps of several hundred soldiers
- IB* Infantry Battalion, usually about 500 soldiers fighting strength (i.e. four to five companies)
- LIB* Light Infantry Battalion, usually about 500 soldiers fighting strength.

Armed Cease-Fire Groups and Militias

<i>Ka Kwe Ye</i>	“Home guards,” the prototype for contemporary cease-fire arrangements
<i>DKBA</i>	Democratic Karen Buddhist Army
<i>UWSA</i>	United Wa State Army
<i>Tha Ka Sa Pa</i>	An armed Karen group that opposes the KNU’s resistance struggle

Armed Opposition Groups

<i>KNU</i>	Karen National Union, main Karen opposition group
<i>KNLA</i>	Karen National Liberation Army, army of the KNU
<i>SSA-S</i>	Shan State Army-South

State Enterprises

<i>MTE</i>	Myanmar Timber Enterprise (within the Ministry of Forestry)
<i>MGE</i>	Myanmar Gems Enterprise (within the Ministry of Mines)
<i>MEHLC</i>	Myanmar Economic Holdings Limited Company
<i>MEPE</i>	Myanmar Electrical Power Enterprise

Common Measurements

<i>Kyat</i>	Burmese currency; US\$1=6.7 <i>Kyat</i> at official rate, trading at between 800 and 1,000 <i>Kyat</i> at current black market rates.
<i>kyat thar</i>	15.3 grams; commonly used as a unit for weighing gold.

Other

<i>Loh-ah-pay</i>	Literally means “traditional voluntary labor,” but it has come to be forced labor under the SLORC/SPDC
-------------------	--

Endnotes

¹ Draft Principle 1: “Human rights, an ecologically sound environment, sustainable development, and peace are interdependent and indivisible.” Draft Principles on Human Rights and the Environment, Human Rights and the Environment: Final Report prepared by Mrs. Fatma Zohra Ksentini, Special Rapporteur, Economic and Social Council, Commission on Human Rights, Sub-Commission on Prevention of Discrimination and Protection of Minorities, U.N. Doc. E/CN.4/Sub.2/1994/9/Annex 1 (July 6, 1994).

² For details, see World Wildlife Fund, “Kayah-Karen Montane Region,” <http://www.worldwildlife.org/wildworld/profiles/terrestrial/im/im0119_full.html> (24 July 2003) and <http://www.panda.org/about_wwf/where_we_work/ecoregions/global200/pages/regions/region029.htm> (24 July 2003).

³ D. Steinberg, *Burma: The State of Myanmar* (Washington D.C.: Georgetown University Press, 2001), 187.

⁴ At that time, he held three important posts simultaneously: Secretary 1 of SLORC; Head of the Office of Strategic Studies; and Director of the Directorate of Defense Services Intelligence. He is now a Lieutenant-General. Ananda Rajah, *Burma: Protracted Conflict, Governance, and Non-Traditional Security Issues* (Singapore: Institute of Defence and Strategic Studies, May 2001), 2.

⁵ Martin Smith, *Burma: Insurgency and the Politics of Ethnicity* 2nd edition (London: Zed Books, 1999), pp. xvi-xvii and Maung Aung Myoe, *The Tatmadaw in Myanmar Since 1988: An Interim Assessment* (Canberra: Strategic and Defense Studies Centre, Research School of Pacific and Asian Studies, Australian National University, 1999), 28.

⁶ The Karenni National Progressive Party (KNPP), the Arakan Liberation Party (ALP) and the Chin National Front (CNF), among others, maintain armed wings. See Human Rights Watch, *My Gun Was As Tall As Me: Child Soldiers In Burma* (New York: HRW, 2002), 110-160. The full report is available at <<http://hrw.org/reports/2002/burma/Burma0902.pdf>> (28 August 2003).

⁷ See Martin Smith, “Ethnic Conflict and the Challenge of Civil Society in Burma,” 15-53 and Aung Naing Oo, “Perspective: The Road Home to Pang Long,” *Himal* October 2002 <http://www.himalmag.com/2002/october/burma_perspective_3.htm> (4 July 2003).

⁸ See Tony Broadmoor, “The Talks: A Two Year Chronology,” *The Irrawaddy* (Research Pages, updated January 2003) <<http://www.irrawaddy.org/res/talk.html>> (2 July 2003) and ALTSEAN-Burma, “Briefing: Black Friday and the Crackdown on the NLD (update) (24 June 2003) <<http://www.ibiblio.org/obl/docs/BlkFriupdatejun24.doc>> (3 July 2003).

⁹ Between three and ten thousand people are estimated to have been killed, while nearly ten thousand more fled to the Thai-Burmese border for their lives. General Ne Win, who headed the military government at this juncture, “retired” one month later. A new military junta, calling itself the “State Law and Order Council” (SLORC), assumed power in his place. For a highly readable account of these events, see Christina Fink *Living Silence: Burma Under Military Rule* (Bangkok: Zed, 2001).

¹⁰ Presently, there are 12 regional commanders. For a current list, see *The Irrawaddy*, “Burma Regional Commanders,” (March 2003) <<http://www.irrawaddy.org/res/commander.html>> (4 August 2003).

¹¹ The military has routinely justified the use of forced labor in the name of national development and published details in its annual statistical review. See, for example, Table 36 of *The Union of Myanmar’s Review of the Financial, Economic, and Social Conditions for 1996-7* which

contains information on the “People’s Contributions” (i.e. forced labor measured in millions of *Kyat*) to the country’s rural development (1962-1997). The SPDC stopped publishing national accounts data in 1998. Subsequent studies by the International Labor Organization and other locally based human rights groups have confirmed that this practice is still widely used. These reports are available at the Burma Online Library, “Home Page,” <<http://www.burmalibrary.org/>>.

¹² Ananda Rajah, *Burma: Protracted Conflict, Governance, and Non-Traditional Security Issues*, 5-6.

¹³ For further discussion, see Global Policy Forum, UN Security Council, “Diamonds in Conflict,” <<http://www.globalpolicy.org/security/issues/diamond/>> (23 July 2003).

¹⁴ For further discussion, see Neil Cooper, “State Collapse as Business: The Role of Conflict Trade and the Emerging Control Agenda,” *Development and Change* 2002 (33: 5): 935-955.

¹⁵ The “Least Developed Country” (LDC) status was created in 1971 by the Economic and Social Council of the UN. The status takes income, human resource development, and the economic vulnerability of a country’s population into account. Countries which receive this designation are eligible for special development aid and debt forgiveness programs. See UN, “Least Developed Countries,” <http://www.un.org/special-rep/ohrlls/ldc/reports.htm> (25 June 2003). After significant lobbying, Burma received LDC status in December 1987. This designation made the country eligible for special development aid and debt forgiveness programs, something it desperately need as its economy was clearly in shambles with a *per capita* income of US\$ 200 per year, an external debt of US\$ 4 billion, and foreign exchange reserves of only US\$ 20 million. See Ananda Rajah, *Burma: Protracted Conflict, Governance, and Non-Traditional Security Issues* (Singapore: Institute of Defence and Strategic Studies, May 2001), 7.

¹⁶ Tyler Gianinni, *Destructive Engagement: A Decade of Foreign Investment in Burma* (Chiang Mai: ERI, 1999).

¹⁷ Institute for International Economics (IIE), “Case Studies in Sanctions and Terrorism: Case 88-1 EU/US/Japan v. Burma,” <<http://www.iie.com/research/topics/sanctions/myanmar3.htm>> (7 July 2003).

¹⁸ The importance of this strategy to the regime became even clearer in April 1997 when the United States banned new investment in Burma by U.S. companies. Similarly, the EU and other industrialized countries, such as Canada, have also removed most trade and aid benefits due to the regime’s continuing refusal to respect the result of the 1990 election and its abysmal human rights record. For more information on the history of trade and other sanctions on the regime, see the European Union’s External Relations website, “The EU’s Relations with Myanmar/Burma,” (June 2003) <http://europa.eu.int/comm/external_relations/myanmar/intro/> (4 August 2003) and the Bank Information Center, “Burma Project,” <http://www.bicusa.org/asia/Burma_project/burmaproject.htm> (8 August 2003).

¹⁹ See Human Rights Watch, *My Gun Was As Tall As Me: Child Soldiers in Burma* (New York: HRW, October 2002) <<http://www.hrw.org/reports/2002/burma/>>, especially Section IV and note 12.

²⁰ Article 19, *Paradise Lost: Environment and Freedom of Expression in Burma* (September 1994) <www.article19.org/docimages/450.htm> (15 July 2003), 6; Open Society Institute, *Burma: Country in Crisis* <www.soros.org/burma/CRISIS/ethnic.html> (15 July 2003), 9.

²¹ Carol Bellamy, United Nations Children’s Fund (UNICEF), *The State of the World’s Children 1999* (1999), 116. More generally, Burma was consistently ranked with the world’s most repressive regimes and pariah states. To see how Burma compares, see Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi, *Governance Matters III: Governance Indicators 1996-*

2002 (Washington D.C.: World Bank, June 2003) <www.worldbank.org/wbi/governance/pdf/growthgov_synth.pdf> (7 August 2003).

²² One commonly cited example includes the Union of Myanmar Economic Holdings Limited (UMEH) corporation. Although technically a private holding company, the UMEH functions much like a state-owned enterprise. Created in February 1990 to help finance the military's activities, the UMEH effectively has a monopoly on the country's main exports by controlling the trade permits and other resources joint ventures need to carry out their activities. G. Houtman, *Mental Culture in Burmese Crisis Politics: Aung San Suu Kyi and the National League for Democracy* (Tokyo: Tokyo University of Foreign Studies, 1999), 107-11; U.S. Embassy Rangoon, *Country Commercial Guide: Burma, Fiscal Year 1998* (Rangoon: American Embassy, 1998).

²³ For a discussion of this policy change, see Naw Seng, "Analysts Skeptical Over New Rice Policy," *The Irrawaddy* (25 April 2003) <<http://www.irrawaddy.org/art/2003/april07.html>> (16 July 2003) and Min Htet Myat, "Lifting Rice Controls: More Questions Than Answers," (May 2003) <<http://www.irrawaddy.org/database/2003/vol11.4/guest.html>> (16 July 2003).

²⁴ NCGUB, "Burma Human Rights Yearbook 2001: Deprivation of Livelihood," <<http://www.ibiblio.org/obl/docs/yearbooks/Deprivation%20of%20Livelihood.htm>> (28 June 2003) and Nancy Hudson-Rod and Myo Nyunt, "Control of Land and Life in Burma," *Tenure Brief* (Madison: University of Wisconsin, April 2001), 4-6.

²⁵ ILO, *Developments Concerning the Question of the Observance by the Government of Myanmar of the Forced Labor Convention, 1930 (No. 29): Report of the High-Level Team* (Geneva: ILO, November 2001), 15, n. 60-61.

²⁶ *Ibid.*

²⁷ For an excellent review, see Amnesty International, *Myanmar: Justice on Trial* (New York: AI, 2003) <web.amnesty.org/library/index/engasa160192003> (5 August 2003). See also ERI, *We Are Not Free To Work For Ourselves: Forced Labor and Other Human Rights Abuses in Burma (January 2002-May 2002)* (Washington D.C.: ERI, 2002) <<http://www.earthrights.org/pubs/fl2002overview.html>>; ERI, *Entrenched: An Investigative Report On the Systematic Use of Forced Labor by the Burmese Military in a Rural Area* (Washington D.C.: ERI, 2003); and ILO, *Developments Concerning the Question of the Observance by the Government of Myanmar of the Forced Labor Convention, 1930 (No. 29): Report of the High-Level Team* (Geneva: ILO, November 2001), 27.

²⁸ J. Jarvie, et al., *Conflict Timber: Dimensions of the Problem in Asia and Africa, Volume 2 Asian Cases* (Washington D.C.: Associates in Rural Development, 2003) <http://www.usaid.gov/hum_response/oti/pubs/vol2asia.pdf> (2 August 2003), 1-2.

²⁹ The Economic Intelligence Unit (EIU), *Country Profile 2002: Myanmar (Burma)* (London: The Economist, 2003), 18, 35, and 43. Simon Phillips, Global Witness (*personal communication*, 6 August 2003).

³⁰ Jake Brunner, Kirk Talbott, and Chantal Elkin, *Logging Burma's Frontier Forests: Resources and the Regime*, (Washington D.C.: World Resources Institute, August 1998), 6. Hereafter, WRI, *Logging Burma's Frontier Forests*.

³¹ Martin Smith, *Paradise Lost? The Suppression of Environmental Rights and Freedom of Expression in Burma* (London: Article XIX, 1994), 13. See also WRI, *Logging Burma's Frontier Forests*, 17. Teak sales in 1995 alone earned the regime US\$150 million, some ten percent of the country's Gross Domestic Product, making it the single largest foreign exchange earner. *Ibid.*, 13.

³² Martin Smith, *Paradise Lost*, 13.

³³ J. Jarvie, *et al.*, *Conflict Timber*, 109. Proceeds from the sale of natural gas and oil to Thailand via the Yadana-Yetagun pipelines, was the largest legal source of foreign exchange. The timing surrounding the purchase of these weapons can be directly linked to the transfer of funds from Thailand to Burma. See Tyler Gianinni, *Destructive Engagement: A Decade of Foreign Investment in Burma* (Washington D.C.: EarthRights International, 1999), especial note 28; ERI, *Total Denial Continues* (Washington D.C.: ERI, 2000). The role of natural gas and oil in sustaining the conflict in Burma, while significant and relevant, is beyond the scope of this study, however.

³⁴ Visitors to the region report that ordinary people spontaneously complained about the lack of transparency in the deals. Steve Thompson (*personal communication*, 20 September 2003).

³⁵ Human Rights Watch, *My Gun Was As Tall As Me*, 148.

³⁶ For a political overview, see Martin Smith, *Burma: Insurgency and the Politics of Ethnicity* (London: Zed Books, 1999) and International Crisis Group, *Myanmar Backgrounder: Ethnic Minority Politics* (Brussels: ICG Asia, 2003). For information of logging in particular, see WRI, *Logging Burma's Frontier Forests*, 17-26.

³⁷ For links to relevant articles by Richard Hughes, a leading authority on the political-economy of precious gems in Southeast Asia, see "Bibliography," <<http://www.ruby-sapphire.com/rwh-biblio.htm>> (5 August 2003). My informal discussions with gem traders and jewelry shop owners over the past thirteen years bears this conclusion out as well.

³⁸ EIU, *Country Profile 2002: Myanmar (Burma)*, 15.

³⁹ Central Statistical Organization, *Statistical Yearbook 2001*, cited in EIU, *Country Profile 2002: Myanmar (Burma)*, 48.

⁴⁰ Adapted from EIU, *Country Profile 2002: Myanmar (Burma)*, 37.

⁴¹ International Crisis Group, *Myanmar Backgrounder: Ethnic Minority Politics* (Brussels: ICG Asia Report No. 52. 7 May 2003), 8, fn. 21.

⁴² This section is heavily based on information from KHRG. See, e.g: "The Current Human Rights Situation in Burma," <<http://www.ibiblio.org/freeburma/humanrights/khrg/archive/khrg95/995hr.html>> (8 July 2003) and "Inside the DKBA, Report #96-14," (31 March 1996) <<http://www.ibiblio.org/freeburma/humanrights/khrg/archive/khrg96/khrg9614.html>> (8 July 2003). See also ICG, *Myanmar Backgrounder: Ethnic Minority Politics*.

⁴³ For details, see Human Rights Watch, "Burma: Abuses Linked to the Fall of Manerplaw," (March 1995, Vol. 7, No. 5 <<http://www.hrw.org/summaries/s.burma953.html>> (8 July 2003).

⁴⁴ See, KHRG, "Inside the DKBA..."

⁴⁵ See KHRG, *Abuse Under Orders: The SPDC and DKBA Armies through the Eyes of their Soldiers* (Thailand: KHRG 2001), 59-74.

⁴⁶ For a summary, see Center for Geopolitical Drug Studies, "Karen Dissidents: New Traffickers and Junta Allies," in *The Geopolitical Drug Newsletter* (February 2002, No. 5), 1-4. <<http://www.geodrugs.net/mini-lettres/new/AEGD%20GB%205.pdf>> (5 August 2003).

⁴⁷ See Section V: Opposition Forces by Human Rights Watch, "My Gun Was As Tall As Me: Child Soldiers in Burma" (New York: HRW, October 2002), <<http://www.hrw.org/reports/2002/burma/Burma0902-05.htm>> (9 July 2003).

⁴⁸ For a discussion of the different types of relocation camps, see Burma Border Consortium, *Internally Displaced People and Relocation Sites in Eastern Burma* (Bangkok: BBC, 2002) <[http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_\(11-9-02\).htm](http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_(11-9-02).htm)> (10 July 2003).

⁴⁹ For a summary of military tactics, see Ananda Rajah, *Burma: Protracted Conflict, Governance, and Non-Traditional Security Issues*, 6.

⁵⁰ For detailed reports on Papun, see KHRG, “All Reports,” <<http://www.ibiblio.org/freeburma/humanrights/khrg/archive/yearly.html>> (9 July 2003). See also, Burma Ethnic Research Group, *Forgotten Victims of a Hidden War: Internally Displaced Karen in Burma* (Chiang Mai: BERG, 1998) <[http://www.db.idpproject.org/Sites/idpSurvey.nsf/wBannerSourcesAlpha/83586C2B846482F9C12567B000331BA4/\\$file/Berg+Karen+IDP+report.pdf](http://www.db.idpproject.org/Sites/idpSurvey.nsf/wBannerSourcesAlpha/83586C2B846482F9C12567B000331BA4/$file/Berg+Karen+IDP+report.pdf)> (9 July 2003).

⁵¹ UN Commission on Human Rights, 10 January 2002, para100 in Global IDP Database, “Myanmar (Burma) Summary (July 2002) <[http://www.db.idpproject.org/Sites/idpSurvey.nsf/wViewSingleEnv/Myanmar+\(Burma\)Profile+Summary](http://www.db.idpproject.org/Sites/idpSurvey.nsf/wViewSingleEnv/Myanmar+(Burma)Profile+Summary)> (1 July 2003). See also, Burma Border Consortium. *Internally Displaced People and Relocation Sites in Eastern Burma* (Bangkok: BBC, 2002) <[http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_\(11-9-02\).htm](http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_(11-9-02).htm)> (5 January 2003).

⁵² This estimate was provided by the Committee on Internally Displaced Karen People. Personal communication (3 August 2003).

⁵³ MTE is one of six departments administered by the Ministry of Forestry. It is specifically responsible for timber harvesting, milling and downstream processing and marketing of forest products. Teak and other hardwoods are sold at monthly auctions. See Ministry of Forestry “Homepage,” <http://www.yangoncity.com.mm/ministry/ministry_of_forestry.asp> (11 July 2003).

⁵⁴ KESAN, *Thulei Kawwei*, 20.

⁵⁵ Personal communication, Simon Phillips (Global Witness), email 15 July 2003. The MTE uses grading rules and other market specifications developed by the Food and Agricultural Organization (FAO). For more information, see Myanmar Inter-Safe Company, Ltd., “Grading Rules for Teak Conversions,” <http://www.forest-treasure.com/mte_grade/> (21 July 2003).

⁵⁶ KESAN, *Thulei Kawwei*, 22.

⁵⁷ KESAN, *Thulei Kawwei*, 23.

⁵⁸ KESAN, *Thulei Kawwei*, 26.

⁵⁹ UN Commission on Human Rights, 10 January 2002, para100 in Global IDP Database, “Myanmar (Burma) Summary (July 2002) <[http://www.db.idpproject.org/Sites/idpSurvey.nsf/wViewSingleEnv/Myanmar+\(Burma\)Profile+Summary](http://www.db.idpproject.org/Sites/idpSurvey.nsf/wViewSingleEnv/Myanmar+(Burma)Profile+Summary)> (1 July 2003). See also, Burma Border Consortium. *Internally Displaced People and Relocation Sites in Eastern Burma* (Bangkok: BBC, 2002) <[http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_\(11-9-02\).htm](http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_(11-9-02).htm)> (5 January 2003) and the Norwegian Refugee Council, *Profile of Internal Displacement: Myanmar (Burma)* (Genvea: Global IDP Project Database, 20 July 2002), 23-43.

⁶⁰ KESAN, *The Civil War and Karen Farmers* (December 2002), an unpublished report on file with author.

⁶¹ KESAN, *Thulei Kawwei*, 14.

⁶² A similar problem occurred farther south, in the Mergui-Tavoy District, where the KNU established 11 wildlife sanctuaries. See WRI, *Logging Burma's Frontier Forests*, 8-9.

⁶³ KESAN, *Thulei Kawwei*, 10.

⁶⁴ KESAN, *Thulei Kawwei*, Interview #3, 25.

⁶⁵ For background information on this industry see, John Wu, *The Mineral Industry of Burma (Myanmar)*, (Washington D.C.: US Geological Survey Minerals Yearbook, 2001) <<http://minerals.usgs.gov/minerals/pubs/country/2001/bmmyb01.pdf>> (15 July 2003) and Roger Moody, *Gravediggers: A Report on Mining in Burma*, (February 2000). <http://www.miningwatch.ca/documents/Grave_Diggers.pdf> (15 July 2003). Information regarding Burma's laws regulating this industry can be found at “The Myanmar Mines Law,” SLORC Law No. 8/94 <http://www.mmaj.go.jp/mmaj_e/asianlaw/myanmar.html> (12 July 2003).

⁶⁶ The area also contains gold and other industrial minerals and gems, e.g.: spinel, garnet, aquamarine, amethyst, citrine, zircon, moonstone and limestone. Roger Moody, *Gravediggers*, 8.

⁶⁷ All foreign assets were expropriated at this time. *Ibid*, 12. For more general information on the area, see S.K. Samuels, *Burma Ruby: A History of Mogok's Rubies from Antiquity to the Present* (USA: SK Samuels Inc., 2003).

⁶⁸ See Peter Gutter, "Environment and Law in Burma," *Burma Lawyer's Council: Legal Issues on Burma* (2001: 9), 11-12.

⁶⁹ The SLORC also promised development assistance and began a Border Areas Development program administered under the Ministry of Border Areas and National Races in 1993. The impacts of this program on the environment is beyond the scope of this report. For more information, see Embassy of Myanmar (Paris), "Development of Border Area and National Races," <<http://www.myanmarembassy-paris.com/nationbuilt/border/border.htm>> (20 September 2003).

⁷⁰ More information on these development can be found in Martin Smith, *Burma: Insurgency and the Politics of Ethnicity* (London: Zed Books, 1999).

⁷¹ Shan Human Rights Foundation, *Dispossessed* (Chiang Mai: SHRF, 1998) <www.shanland.org/SHRF/dispossessed/dispossessed.htm> (8 July 2003); The Lahu National Development Organization, *Unsettling Moves: The Wa Forced Resettlement Program in Eastern Shan State (1999-2001)*, (Chiang Mai: LNDO, April 2002)

<www.shanland.org/shrf/Wa/contents.htm> (22 July 2003); SHRF *Charting the Exodus From Shan State (1997-2002)* (Chiang Mai: SHRF, 2003) <www.shanland.org/shrf/Chartingtheexodus.pdf> (8 July 2003); Global IDP Database, "Myanmar (Burma): Causes and Background of Displacement," <<http://www.db.idpproject.org/Sites/idpSurvey.nsf/wViewCountries/D244E98B58E38862C1256BFB00479DC1>> (18 July 2003).

⁷² *The Irrawaddy*, "List of Cease-fire Agreements with the Junta," <<http://www.irrawaddy.org/res/cease-fire.html>> (15 July 2003). Compare with the list contained in ICG, *Myanmar Backgrounder: Ethnic Minority Politics*, 27-8.

⁷³ Interestingly, Section 12(a) of the No. 8/95 law contained language that indicated applications to the Ministry of Mines had to conduct something similar to an environmental impact assessment prior to receiving official approval; applicants "must determine whether such excavation could damage nearby property and buildings, whether third party rights will be affected or not, and appoint the Myanmar Gems Trading Corporation to investigate if reserve areas, wildlife and natural habitats, highways, religious property or cultural heritage could be affected by such excavation." There is no indication, however, that any application was turned down for failure to conduct such a study. Additionally, the new law did not repeal the terms of the Myanmar Mines Law of 1994 (SLORC Law No. 8/94), which states that no mining company is liable to prosecution or fines. See, Peter Gutter, "Environment and Law in Burma," *Burma Lawyer's Council: Legal Issues on Burma* (2001: 9), 11-12.

⁷⁴ The Myanmar Economic Holding Limited Company (MEHLC) and the Myanmar Economic Corporation (MEC) are corporate entities created by the military. Both have dramatically expanded their reach into strategic profit-making enterprises organized around the exploitation of the country's natural resources and, increasingly, the manufacturing sector. The U.S. Commercial Service, "Burma: Country Commercial Guide (Chapter 2), <<http://www.usatrade.gov/website/ccg.nsf/CCGurl/CCG-BURMA2002-CH-2:-0045F7E4>> (15 July 2003).

⁷⁵ Conglomerate consists of a “cemented” rock, i.e. smaller pebble-sized rocks that are held together by some natural binding agent such as clays, mineral deposits, etc. Conglomerate can be broken apart fairly easily.

⁷⁶ The practice, which began in 1853 in the Sierra Nevada Mountains of California during the Gold Rush, was so destructive and the downstream pollution risks so high that the practice was completely outlawed in 1884. United State Geological Society, “Historical Bathymetric Change in Suisun Bay: 1867-1990,” <<http://sfbay.wr.usgs.gov/access/Bathy/suisunbay/mining.html>> (11 July 2003).

⁷⁷ See Appendix IV, “Interview with a Former Mining Engineer on Mining Conditions in Burma,” in Roger Moody, *Gravediggers: A Report on Mining in Burma* (February 2000), 63-6.

