

15th Annual Edition

BURMA

HUMAN RIGHTS YEARBOOK 2008





CHAPTER 9
Environmental Degradation

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9.1 Introduction

“Investment in natural resources and infrastructure in Burma has been accompanied by forced labour, forced relocation of indigenous populations, and environmental devastation. Key industries are controlled by military-run enterprises and plagued by incompetence and corruption.”¹

Burma is a country rich in biodiversity, with a wealth of natural resources. This biodiversity however, is under threat in many ways, but particularly from the impacts of the projects which exploit natural resources for energy. Oil, gas and hydroelectric projects are all a valuable source of income for the regime, which exploits the country’s abundant natural resources by signing deals with neighbouring countries for the extraction and export of these resources. Seldom do those Burmese citizens living in the areas of the projects see any benefits. Instead, they are often subjected to a wide variety of human rights abuses associated with increased militarization around the projects; abuses including forced labour, land confiscation and resettlement, among others. In addition, their drinking water supplies are threatened, as is the fertility of their farmlands.

2008 saw environmental devastation of a different kind with the impact of cyclone Nargis, which took many lives, destroyed land and tainted water supplies throughout the Irrawaddy delta region. (For more information on cyclone Nargis, see Chapter 10: Cyclone Nargis – From natural disaster to human catastrophe)



Students planting physic nut seedlings within their school grounds in Tiddim Township, Chin State. The SPDC has announced its intention of bringing 8.36 million acres of farmland throughout the country under physic nut cultivation by the end of 2009. Villagers across the country have been subjected to land confiscation to make way for the project, while others have been forced to purchase the seedlings from the military for cultivation on all available tracts of land. Though surveys conducted in January 2007 showed that Chin State was ill-suited to the crop, the junta has pushed ahead with the project regardless, almost invariably at the expense of villagers’ livelihoods. [Photo: © MWAF]

9.2 Dams and Hydropower

Dam projects in Burma are closely linked to large-scale displacement, militarisation, human rights abuses and irreversible environmental damage, all of which have a negative effect on the livelihoods and food security of millions of people. The construction of large dams changes the profiles of riverbeds, and thus upsets a fine ecological balance. Nutrients can become trapped, leaving once fertile land nutrient-deficient, and fears remain over salt water intrusion into fresh water supplies. According to Thai-based environmentalist Steve Green, soil infertility would necessitate the purchasing of fertiliser by poor farmers to compensate for the degradation, a cost most can ill afford. Another serious concern of environmental groups is that the construction of dams in areas of seismic activity, in Kachin State or on the edge of the Shan Plateau for example, would result in devastation in the event of earthquake-induced damage to a dam.²

A number of countries are involved in dam projects in co-operation with the SPDC. Companies in China, India, and Thailand, many of them state sponsored, have won concessions for the development of hydropower stations throughout Burma.³

A report by International Rivers, (an NGO concerned with the environmental impacts of damming) focusing on China's overseas dams, many of which are located in Burma, mentions many destructive impacts of large dams: destruction of flora and fauna along the river; change in seasonal water level variations, negative effects on the growing pattern of local crops; riverbed erosion which can lead to lowering of the groundwater table, which in turn threatens vegetation, wells and the flood-plain. In addition to threats to drinking water and crops, fish supplies are also depleted by dam construction. According to 2008 statistics, dams pose a threat to 20 percent of the world's freshwater fish species.⁴

At the same time, the electricity produced by many of the dam projects in Burma, is not usually made available to those who live in the areas surrounding the dams or elsewhere, but rather it is neighbouring countries which benefit from the electricity supply. Furthermore, slower water flows resulting from the damming of the Irrawaddy and Salween rivers mean that pollutants could build up instead of being flushed away as is normally the case,

“River dam systems planned on the major Irrawaddy and Salween rivers—to generate electricity for Thailand and China—will reduce water flows which will not only undermine drinking water and fish supplies downstream, but also dangerously raise pollution levels from mercury and other poisons leaking from crude gold mining practices upstream.”⁵

Displacement of people is also reported in relation to dam projects: both due to flooding of areas normally inhabited, and as a result of increased militarisation of the areas. The proposed Upper Paunglaung dam project in Karenni State provides an example of the implications of large infrastructure projects, with the construction of the dam set to displace roughly 3,500 villagers and flood 5,000 acres of arable land.⁶ Higher concentrations of troops connected to previous dam projects such as the Lawpita Dam, built in the 1960's, led to associated human rights abuses at the hands of the military, and the laying of land-mines close to certain dam sites.⁷ (For more information on displacement and forced relocation, see Chapter 19: Internal Displacement and Forced Relocation)

The Salween Dams

Ten years ago, Thailand won a concession to build a massive dam on the Salween River in southern Shan State. With a capacity of 7,100 Megawatts, and at a height of 228 metres, the Tasang Dam will be the biggest dam in Southeast Asia and will flood hundreds of square kilometres of land, according to Salween Watch.⁸ Construction began in November 2007, and a military security force was put in place to provide security for the project.⁹ Some abuses have already been associated with the early phases of the dam construction; according to the environmental NGO Burma Rivers Network,

“In June 2007, the Burma Army confiscated lands in Wan Mai village of Mong Ton Township and gave them to MDX company (a company contracted to help build the dam) to build an office. Approximately 400 villagers were forced to attend the ground-breaking ceremony for the dam in 2007.”¹⁰

Projects such as the Tasang and Wai Gyi dams on the Salween River, threaten the rich biodiversity of the river, and could result in the extinction of over 40 endangered species normally found in the river. In addition, a shortage of freshwater is a threat in those areas where the river downstream dries up as a consequence of the dam construction.¹¹

In the planning and construction process for these 'mega-dams', the public has been kept in the dark about environmental assessments and those who reside in the areas of the dam sites have never been consulted about the consequences, and in some cases, such as in the Tasang Dam construction, have not been forewarned of SPDC plans,

“A series of secretive agreements between the Thai and Burmese Governments, and the Electricity Generating Authority of Thailand (EGAT), culminated in a December 2005 Memorandum of Understanding, to build four mega-dams (Tasang, Wei Gyi, Dar Gwin and Htut Gyi) on the Salween (Thanlwin) River, and one on the Tenasserim River. Environment Impact Assessments on the planned dams have not been released to the public, and at no time in the agreement process were people at the proposed dam sites consulted, or even informed.”¹²

Dam projects on the Salween River will affect people in Karen, Karenni, Shan and Mon States. The people of Karenni State have experienced the consequences of dam projects before; a dam built at Lawpita in the 1960's did not provide any electricity for the Karenni people living along the river plains. Instead the dam resulted in;

“water shortage, destructive floods that destroy crops, disrupted fish habitats, thousands of Burma soldiers come and occupied the area causing human rights abuses such as forced labor, displacements of people and laying of land-mines on farm fields, sexual violence and extra-judicial killings”¹³

More recently, construction has begun on more hydropower plants in Karenni State. The Karenni Development Research Group (KDRG) claimed in early 2008 that Chinese financed construction of Karenni State's third power plant has led to cases of forced labour, and incidences of landmine injury to eight civilians who were clearing land around two Lawpita hydropower plants near Loikaw.¹⁴

Dams in Kachin State and Earthquake Fears

In Kachin State, the Myitsone hydropower project, on the Irrawaddy River was launched in May 2007. The Myitsone Dam is the biggest of seven dams located in Kachin state. According to the Kachin Development Working Group (KDWG), the Myitsone Dam poses a serious threat of flooding due to the fact that the dam is close to an earthquake fault line. The surrounding area experienced at least four earthquakes in 2008, one measuring up to 5.3 on the Richter scale.¹⁵ The location of the Myitsone dam project is only 100km from an earthquake fault line, and a large quake may have the potential to destroy the dam which would endanger the state capital of Myitkyina and its inhabitants of 140,000 people.¹⁶ Despite repeated appeals by environmental and human rights groups, construction on the Myitsone project continues.¹⁷ Additionally, the townships of Waingmaw, Sinbo and Bhamo Townships along the Irrawaddy River, where hundreds of thousands of people live, would also be at risk of flooding.¹⁸

Elsewhere in Kachin state, in the area of Chibwe, farmlands have been seized, and local people are being put under pressure to relocate to make way for the construction of a hydropower station on the N'mai Hka River. This displacement, along with the destruction of flora and fauna in the area is a cause for concern for those living in the area.¹⁹ Again, appeals to stop the construction have been made to the companies involved, an unidentified Chinese company and the Myanmar-Asia World Company. These appeals have however, been ineffectual.²⁰

In January 2008, human rights abuses were reported following the arrival of Light Infantry Battalion (LIB) #121 to provide security for the construction of the Myitsone Hydroelectric dam site which was being built 26 miles (42 km) north of the state capital of Myitkyina, in Kachin State. The soldiers took over a library in nearby Tanghpore village, extorted money from local merchants, took goods from shops without payment, and vegetables and animals from locals. Reports suggest that the local population was also threatened and told not to contact any media organisations or report what was transpiring in the area.²¹

On 29 April 2008, three villagers, one Palaung and two Kachin drowned during the building of Shweli dam. They were recruited as forced labour for the project. Other villagers who fled because of the forced labour demands were beaten.²²

On 13 July 2008, in Chibwe, Kachin State, Christian religious leaders were summoned for interrogation in relation to a poster campaign against the Chibwe dam project. The Chibwe Dam project had started earlier in the year and resulted in land theft and environmental degradation by the stakeholders; a joint venture between a Chinese company and the Myanmar-Asia World company.²³

Arakan State

In November 2008, villagers were forced by the Burmese military to assist in the construction of a hydroelectric dam in Kyauk Taw Township. On a daily basis, 100 to 150 villagers from the surrounding area, mostly from the Rohingya ethnic group, were forced to go to work on the construction site of the Zee Chaung Dam, between 6:00 am and noon. The labourers were said to be receiving 2 kilograms of rice per day but no salary for their work.²⁴

Mon State

Construction of the Win-pa-non Dam in Mon State was also giving rise to concern among locals in early 2008 due to plans to rebuild the cracked and damaged base of the dam. This work would involve releasing water from the dam, which would threaten approximately eight villages in the area with flooding. Locals were also concerned that the proposed repairs may increase taxation at the hands of authorities. According to a villager who lives near the dam, the repairs may also endanger livelihoods,

*“They (authorities) want to complete the dam work before the rainy season, which means they only have two months to act. The villagers along the Dam were forced to plant (S)ummer paddy that will now be flooded, along with our other plantations like melon and vegetables”*²⁵

Chin State

Heavy rains during the monsoon season often cause the Chindwin River to burst its banks.²⁶ In 2008, the Indian state-owned National Hydroelectric Power Corporation (NHPC) won the rights to build two hydroelectricity dams; a 1,200-megawatt hydro-dam at Tamanthi, and a smaller 600-megawatt capacity system at Shwzaya in northwestern Chin State bordering India. The company has a reputation for using armed staff to intimidate people into leaving dam development areas, and has been called *“India’s ugliest dam builder”* by German NGO Urgewald.²⁷ Despite power shortages in Burma, all 1,800 megawatts of electricity capacity from the two new hydropower dam projects will go to India, earning the junta around US \$3.2 billion. An energy industry consultant based in Bangkok, Sar Watana pointed out, however, the futility of the electricity being used for domestic purposes, saying,

*“The planned generating power of these two hydro systems is greater than Myanmar’s entire national electricity capacity at present,...But of course it would in any case be of very little use to Burma without a major upgrade and expansion in the country’s grid transmission infrastructure, which is very poor.”*²⁸

Shan State

In southern Shan State, ethnic Karenni people will suffer displacement due to the dam at Paunglaung, in the Pyinmana mountain range. The upper Paunglaung Dam is situated 26 miles east of the new capital, Naypyidaw. Construction began on the Chinese-funded dam in 2004, and is due to be completed in December 2009, with the resulting electricity being used to provide power to the new capital, Naypyidaw.²⁹ According to a study released on 18 June 2008 by the Kayan Women’s Union (KWU) entitled *“Drowning the Green Ghosts of Kayanland”*, the dam will result in the destruction of over 5,000 acres of fertile land and the displacement of 3,500 people.³⁰ Due to the presence of security forces associated with the dam, forced labour has also been reported at the site and the people of the area have never been consulted about the project, or been offered compensation for loss of their land.³¹

The general secretary of the Burma River Network, Ko Aung Nge, had the following to say regarding the dam and the lack of consultation with local residents:

*“[T]his (dam) will have a negative effect on locals. I want the public to be aware of the negative effects and public participation in our movement to stop it. We want parties involved in the dam construction to realize the negative consequences and stop the dam construction.”*³²

9.3 Extractive Industries

*"It's reasonable to say that Burma is being systematically plundered for its natural wealth by its big neighbours, China, India and Thailand...The loss over time of gas, oil, timber, precious stones and now metals will further impoverish Burma's economic development if and when the regime comes to an end."*³³

Burma is a country rich in natural resources which have the potential to provide ample finance for improvements in health, education, infrastructure and other areas in which only limited investment is currently made. It is estimated for example, that the natural gas fields in the Bay of Bengal and the Gulf of Martaban, if managed efficiently, could generate annual revenue of US\$2 billion for a period of 40 years.³⁴ Instead of investing revenues in the infrastructure of the country however, the SPDC has consistently used the revenue generated through foreign investment in extractive industries to purchase arms and to strengthen the military. The SPDC have continued to sell off the country's vast and valued natural resources to foreign investors who enter into joint contracts with state owned enterprises, exporting oil and gas resources, while the majority of the country has no access to electricity. A broad range of human rights violations including forced relocations, forced labour and environmental destruction customarily accompany extractive industry projects.³⁵

Natural Gas

*"Currently, 13 foreign oil companies, mainly from Australia, Britain, Canada, China, Indonesia, India, South Korea, Malaysia, Thailand and Russia, are involved in oil and gas projects in Myanmar, according to official sources."*³⁶

Yadana Natural Gas Project

According to EarthRights International (ERI), human rights abuses relating to the Yadana natural gas project began in 1991, and continued into 2008. Security for the pipeline is provided by the Burmese military, which has been responsible for incidents of forced labour, torture, rape and murder, since deployment to the project.³⁷

The US company Chevron owns a 28 percent share in the Yadana gas project, making it the largest US investor in Burma. While remaining silent on the issue of human rights abuses in connection with the project, Chevron has removed all mention of Burma from its website.³⁸ The other shareholders in the project are the Burmese state-owned Myanmar Oil and Gas enterprise, the petroleum Authority of Thailand, and France's Total, which owns a 31 percent stake.³⁹ Total also has stakes in the Yetagun gas pipeline, in the Gulf of Martaban. Forced labour at gunpoint has also been alleged in the construction of this pipeline to neighbouring Thailand.⁴⁰

Yunnan Pipeline

A deal was signed in June 2008 between China and Burma for the construction of a pipeline from Burma's western coast to Yunnan, in China.⁴¹ Construction of the pipeline was due to begin in 2009, amid fears voiced by human rights groups of forced re-locations and forced labour along the pipeline route. The project which is jointly owned by the Myanmar Oil and Gas Enterprise and the China National Petrol Corporation involves the construction of a US\$1.5 billion oil pipeline and US\$1.04 billion gas pipeline.⁴²

Shwe Gas Project

The largest natural gas field in Burma is the Shwe gas field in the Bay of Bengal. Shwe means gold in the Burmese language, which seems fitting given that the reserves in this area are estimated to be in the region of 10 trillion cubic feet of natural gas, which could earn the regime US\$12-17 million in the next 20 years.⁴³

The concession for exploration of the blocks of gas in this field was awarded to South Korean company, Daewoo in 2000, and the proximity of these blocks, particularly a newly explored block, 'AD-7', to the disputed area between Burma and Bangladesh, has caused tension between the two countries.⁴⁴ In November 2008, the SPDC sent warships to accompany Daewoo exploration vessels and rigs, while Bangladesh responded in kind with the dispatch of a number of naval vessels to the area.⁴⁵ The dispute was resolved after a few days, at least temporarily, with the initiation of the withdrawal of the Daewoo rigs.⁴⁶

The increased militarisation of the area which is being explored has had serious repercussions for the local people. The Shwe Gas movement has said of the project;

“The Shwe project has already lead to forced relocations, beatings, intimidation and other abuses against people and communities in the project areas and against local populations expressing opposition to the project.”⁴⁷



A section of the Yadana Pipeline in Mon State. Since the inception of the controversial project, there have been numerous reports of forced relocation, land confiscation and forced labour in the pipeline area related to the project. [Photo: © AP]

Arakan State

On 10 June 2008, it was reported that inhabitants of a village at the promontory of the Mayu Peninsula in Rathedaung Township, Arakan State, were given notice to relocate by the military authorities. This happened after gas deposits were found nearby by a Chinese company, China National Offshore Oil Company (CNOOC). The company also confiscated land in Ko Dan Kauk, Shaing Khali, Angu Maw Kon Dan, and Angu Maw in the southern end of the Mayu Peninsula, in addition to four small islands - Nantha, Wet Thet Cha, Krat Thwan, and New Maw - near Angu Maw Village. Gas deposits were discovered on these islands by the same company.⁴⁸

It was revealed in July 2008 that in Arakan State, Indian oil company Essar was due to begin exploring natural gas options in the Sittwe and Maungdaw regions, an area known in oil exploration circles as 'L-Block'. The company was due to begin drilling test wells late in 2008 as part of an agreement signed in May 2005 with state-run Myanmar Oil and Gas Enterprise. A second area, known as A-2, which lies off the coast of Arakan State was to be explored at a later stage.⁴⁹

On 31 October 2008, *India Press* reported on environmental destruction and human rights abuses on Ramree Island, in Arakan State. Explorations led by CNOOC destroyed rice fields and plantations, according to Arakan Oil Watch. Forced relocations were also reported, and no environmental impact assessment was carried out in advance of the drilling.⁵⁰

Oil

*"All but (US)\$1 million of the (US)\$622 million direct foreign investment in Burma over the first 11 months of the 2006-2007 fiscal year came from oil, gas and other power projects."*⁵¹

Another resource which Burma has an abundance of is oil. Myanmar Gas and Oil Enterprise claim that there are 3.2 billion barrels of recoverable oil reserves in Burma, and companies all over the world are competing for a share in the proceeds. Many of the same companies which are exploring for gas are also drilling for oil in the same areas, in partnership with Myanmar Oil and Gas Enterprise (MOGE).⁵²

Chinese companies have been awarded more gas and oil exploration licences in Burma than any other country. According to locals on Ramree island of Arakan state, a consortium led by China National Offshore Oil Company Ltd (CNOOC) has confiscated land, polluted soil and waterways in the course of their searches. One local farmer spoke to Arakan Oil Watch about her experiences with CNOOC,

*"Over one acre of my land was confiscated by CNOOC's oil workers for their camp. They did not offer me any compensation. They seized land from many other people as well. To my knowledge, the others also received no compensation."*⁵³

Traditionally, locals have drilled for oil themselves on a very small scale, in order to supplement the small income derived from the farming season. The advent of drilling and exploration by CNOOC has resulted in land and oil drilling rig confiscation by the local authorities with no hint of compensation.

Extractive Mining

Following oil and natural gas, gems were Burma's third most important export in both 2006 and 2007.⁵⁴ Environmental groups such as EarthRights International are concerned that indiscriminate jade and ruby mining in northern Burma is destroying the eco-systems of the area.⁵⁵ Poor mining practices have led to landslides, floods and other environmental damage.⁵⁶

China's record for uncontrolled development with negative effects on both human rights and the environment gave rise to concern over Chinese companies mining in Burma. A nickel mining project in Tagung Taung, in Mandalay Division, was given the go-ahead in September

2008, and would become of the largest mining projects in the country, but environmental groups voiced concerns over land acquisition, displacement and the environmental impacts of the proposed project. Concerns were also raised regarding another Chinese supported nickel mining project in Mwetaung, Chin state.⁵⁷

On 25 June 2008, it was reported that two mining centres, Hpakant and Mogok, in Kachin State were hit by floods and landslides. Between 11 and 22 people died in Mogok, in floods and landslides brought on by a combination of torrential rain, and forest clearance by mining enterprises.⁵⁸ In Hpakant, people were also displaced when their homes in upland areas were bulldozed by jade mining companies. The ecosystem of the river was also reported to be under threat as a result of soil dumped in it by the mining companies.⁵⁹



A small-scale copper mining project managed by local residents of Monywa Township in Sagaing Division. Though projects such as this do far less damage to the environment than larger endeavours run by the SPDC and its affiliates, sites such as this implement very few environmental protection policies and often result in polluting the local environment. *[Photo: © Mizzima News]*

9.4 Deforestation

Deforestation continued in Burma throughout 2008, a country which is reported to have lost 18 percent of its forests between 1990 and 2005. This deforestation rate is one of the highest in the world, and is on the increase, according to statements by Burma Rivers Network:

“Fifteen tonnes of illegally logged timber crosses the Burmese border into China every seven minutes, 24 hours a day, every day of the year. Deforestation continues to increase. However, it is difficult to estimate how much increase there has been as almost all logging is illegal.”⁶⁰

According to Altsean, deforestation gives rise to soil erosion, sedimentation of rivers, increased flooding, acute dry season water shortages, and decreases in biodiversity. The deforestation in Burma, Altsean says, occurs as a result of timber extraction to meet the demands of Chinese industry. It also happens when land is cleared for infrastructure projects, and for the immediate survival needs of local populations. Despite Burma's large gas reserves, almost two thirds of energy generation within the country comes from burning timber.⁶¹

Teak wood, which has long been a traditional building material in Burma, is becoming scarce.⁶² Currently, 70 percent of the world's teak comes from Burma, and despite international embargoes against the sale of Burmese teak, logging in all but the most inaccessible regions of the country has provided funds for the military regime through smuggling to neighbouring countries where embargoes are not enforced.⁶³

Coastal regions of Burma are also prone to degradation due to economic necessity. The problem of depletion of mangrove forests was highlighted in the aftermath of Cyclone Nargis. In addition to the rich biodiversity which exists in the mangrove areas along Burma's coast, the mangrove forests provided protection against the worst effects of the cyclone.⁶⁴ However, in many areas where the mangrove forests had been cut down, for breeding of fish and prawns, devastation was wrought due the lack of a natural barrier against the storm surge.⁶⁵ This type of deforestation is often the result of population pressures.⁶⁶

In Arakan State, much of the timber exported goes to Teknaf port in Bangladesh. On 20 April 2008, about 155 metric tonnes of different types of valuable timber reached the port in one day. All of the timber came from Taungup Township, Arakan State.⁶⁷ With exports of this size, timber and materials like bamboo are becoming increasingly scarce in Arakan State, and local people have faced difficulties in buying bamboo for house construction, because of steep price increases.⁶⁸

In another area of Arakan state, near the Mayu mountain range, teak forests were cleared to prepare the ground for a government rubber cultivation project.⁶⁹

Deforestation of Mount Popa, in the Myin Gyan District of Mandalay Division, has resulted in the decline in butterfly species in the area. A habitat of some of the rarest butterflies in the world, Mount Popa has seen a decrease in species from 100 in 1982 to only 32 species in 2007. Ongoing deforestation at the hands of the military and logging firms and climate change are cited as responsible for the decrease.⁷⁰

In Sagaing Division, forest clearance for the Htamanthi Dam project has destroyed the habitat of indigenous wildlife such as elephants, wild boars and tigers. The Chinese company responsible for the project construction was given permission to clear an estimated 100 square miles of forest. In addition to the flight of animals, the deforestation could also

lead to extinction of rare medicinal plants and herbs. Livelihoods of the local people have been threatened as a result, according to accounts from local Naga, Kuki and Red Shan inhabitants of the area. These groups were also forced off their land to make way for the construction of the dam which would flood the surrounding region.⁷¹

On 2 January 2008, it was reported in Kachin State, that the eldest son of the military regional commander who owned most of the shares in a local logging company called Awng Mai, had received special authorisation, from his father, to export timber to China. This was despite the fact that China officially stopped importing timber from northern Burma in 2005.⁷²

On 16 January 2008, it was reported that the Hukawng Valley tiger reserve in Kachin State was under threat as a result of logging by the Rangoon based Yuzana Company. The company, which had a road reconstruction contract with the SPDC for the 100 mile Ledo road, cleared trees 10 miles to the left and right of the road, and the subsequent disappearance of wild animals such as elephants, deer, foxes and tigers created concern among locals. According to local sources, the Danai River in Hukawng Valley was filled with logs and roots disposed of by the company. The same locals also lost much of their own pastures and wood for construction and fuel, as a result of the deforestation.⁷³

On 21 January 2008, it was reported in Aunglan Township that USDA members had felled teak trees illegally. The incident occurred on 12 December 2007, and the case was taken to Thayet District PDC (Peace and Development Council), and the district forestry department against a group of USDA officials who ordered the felling of two trees. It was estimated that the action of felling the trees generated 1 tonne of teak for sale at 600,000 kyat at local prices. No action was taken against the officials.⁷⁴

In March 2008 in Kachin State, locals in the area of Ugang Mountain, in the village of Nawngkhying, reported that nearby mountain streams had dried up as a result of rampant logging by both Chinese loggers and by a Kachin peace group, the Lasang Awng Wa Peace Group (LAWPG).⁷⁵



A timber camp located on Sino-Burma border in Kachin State. Logging concessions such as this one have devastated the forests of Burma as they extract the valuable teak wood from old growth forests. The HRDU has not heard any reports of any logging companies extracting timber from Burma engaging in reforestation programs to replenish the trees that they take. *[Photo: © KNG]*

In April 2008, residents of Wai Maw Township, Kachin State, expressed concerns about tree felling in the Yewe mountain range. They reported that streams had dried up on the mountain as a result; leaving them without the groundwater they had been relying on for their farms.⁷⁶

On 23 May 2008, it was reported that tree felling by the Burma army and ceasefire groups in Karenni State, totalling an estimated 20,000 tons of timber, had caused a water shortage in the area. Locals said *"in Chikel, which is near Loi Kaw all wells are dry. The Hteyleetaw lake in Kayah, is bereft of water."*⁷⁷

In September 2008 it was reported that teak in the 3,000 acre Mayu forest reserve was cut down to make way for rubber cultivation by order of the SPDC authorities, a ministry official said, *"We are now cutting down all teak in the Mayu forest reserve to cultivate rubber instead of teak in the area after the high government authority ordered us to clean the area during 2008."*⁷⁸

On 15 December 2008, a villager was killed by gunshot as a result of a conflict between villagers and illegal timber loggers in the village of Kone Ting in Mansi Township.⁷⁹

On 19 December 2008, KNG reported on monthly bribes paid by Chinese timber businessmen to military, police and SPDC authorities in Kachin State. This area was controlled at the time of reporting by the Burmese junta's Northern Military Command commander Major-General Soe Win. The township in question was Mansi Township, and the bribes were paid as follows:

1. Lieutenant-Colonel Aung Moe Naing, Commander of Light Infantry Battalion (LIB) #319 received 10,000,000 kyat;
2. Major Zaw Myo Oo, Military police under LIB No.319 received 10,000,000 kyat;
3. U Soe Than, Chairman of Township Peace and Development Council received 1,000,000 kyat;
4. Htun Kyi, Deputy police in-charge of the township received 600,000 kyat;
5. U Kyaw Htun, Head of Township Immigration, received 500,000 kyat;
6. U Myint Than, Head of Township Land Registry, received 300,000 kyat;
7. U Hla Pye, Head of Township Agriculture, received 300,000 kyat;
8. Corporal Nong Htun, Township Military Affairs Security Unit (Sa Ya Pha) received 6,000,000 kyat;
9. Sergeant Zaw Nyunt, Township Special Police received 6,000,000 kyat;
10. The head of the township forestry received 1,000,000 kyat;
11. The Special Mansi representative to Naypyidaw received 2,000,000 kyat.⁸⁰

9.5 Forced Cultivation

The forced cultivation of various crops constituted a widespread problem in 2008. In many agricultural areas, like Murng Nai in Mon State for example, farmers were forced to plant and grow crops to help supply the military, reducing both the land at the disposal of farmers for the cultivation of their own crops, and the amount of time the farmers were able to spend on their own land. This led to reductions in crop yield and in some cases crop failures, which affected household incomes for farmers.⁸¹ The junta's 'two crops policy' saw many farmers ordered to cultivate rice in the hot season, but difficult growing conditions, and the requirement for premature harvesting of wet season harvests meant that many farmers suffered low yields, and also spent a high proportion of their wet season income on growing the hot season crop.⁸²

There were forced agricultural practices in Chin State as well, where, in addition to summer paddy cultivation, farmers were often forced to cultivate other crops such as sugarcane, groundnuts and sunflower.⁸³ Due to a lack of water, unsuitable land, and lack of knowledge, these crops often failed. The arrival of troops to enforce cultivation of crops ensured that farmers did not disobey the instructions. Another incentive to proceed with forced cultivation and tending of military crops was the threat of a tax or fine for non-compliance with orders.⁸⁴ Confiscation of Rohingya farming lands in Maungdaw Township Arakan State was also reported. Rohingya farmers had been ordered by local authorities to grow beans and pulses among other seasonal vegetables. Some farmers, however, were not able to comply with such demands as they did not have the resources. Local authorities then appealed to the Township Peace and Development Council authorities to have the lands of those failing to follow the directives confiscated and handed over to NaTaLa model villagers who had been relocated from inland Burma.⁸⁵

The year 2008 saw the junta focusing their attentions on the growth of fuels for bio-diesel, in particular the cultivation of *Jatropha*, also known as 'physic nut'. Instances of forced cultivation of this crop increased in 2008, according to Altsean.⁸⁶ Despite cautions that the cultivation of bio-fuels could lead to food insecurity, environmental damage, and inequitable distribution of financial return, the bio-fuels program in Burma was being expanded throughout 2008, even while poorly planned crops were failing.⁸⁷ According to a report by the Ethnic Community Development Forum entitled "*Bio-fuel by Decree: Unmasking Burma's Biofuel Fiasco*", lands traditionally used for growing food crops were to be reallocated for the growing of bio-fuel crops such as *Jatropha*, which could lead to food insecurity in future. As of 2008 the SPDC still had plans to plant around 500,000 plants in each state and division nationwide.⁸⁸

The report also highlighted the fact that in some cases the fuel used in cultivating bio-fuel crops at times exceeded the expected fuel yields from those crops. This was in addition to the deforestation that comes along with clearing lands for cultivation. There are also the problems associated with the distribution of land and ownership; the ECDF report voiced concerns over poor farmers being forced off common grazing lands for livestock, which would further impoverish the already poor rural farming community.⁸⁹

From mid-2007 up to early 2008, villagers of Huay Yae Khao and Phak Yaang villages in Wan Yaen village tract in Si-Seng Township were forced by SPDC troops of LIB #517 to grow crops for the military. They were forced to grow *Jatropha* (also known as '*physic nut*'), and seasonal crops for the troops, including soya bean and corn, using their own tools and providing their own food throughout the cultivation period.⁹⁰

In January and February 2008, farmers in Mon State were ordered by SPDC authorities to cultivate a summer crop of paddy (rice). The order was given in Mudon and Thanbyuzayart, and nearby villages, Chak Toie, Dai Mai and Saung Min. Due to it being the wrong season for cultivating these crops, villagers were forced to purchase water and fertilizer to ensure the crops would succeed. Those farmers who refused to cultivate crops were forced to pay taxes of 10,000 to 15,000 kyat.⁹¹

In February 2008, family members of SPDC in Ngwe Saung Township seized 3,000 acres of land from farmers, for use as a rubber plantation. The farmers were given no compensation, and those who seized the land demanded wheat or labour from anyone passing through the land. The case was reported to the Village Peace and Development Council, but no action was taken.⁹²

In July 2008, villagers in Maungdaw Township, Arakan State were ordered by Township Peace and Development Council (MaYaKa) Chairman U Khin Maung Tun to buy rubber saplings or seedlings from government nurseries and to cultivate rubber. Villagers were charged 300 kyat for the saplings, but were given no direction on where or how to grow them.⁹³

In August 2008, the SPDC LIB #99, based in Lin Khe Township in southern Shan State, forced locals to grow physic nut and sesame for the military. Those who had tilling equipment were ordered to use it, and those who did not were ordered to work with their hands. Similar orders were given by LIB #99 in September in a number of villages including:

1. Wan Nong Lum;
2. Wan Than Kan;
3. Wan Nam Thoke;
4. Nam Thin;
5. Nam Naw;
6. Lom Kaw⁹⁴

In September 2008 farmers in Laputta Township, Irrawaddy Division were forced to sign blank contracts for supplies that they had received. The farmers stated that they had no choice but to sign, and that they would have to pay whatever amount was asked, because it would be written on the contracts later.⁹⁵

In October 2008 local authorities in Myingyan, Mandalay Division forced farmers to grow cotton as a project crop. If farmers wanted to grow crops other than cotton however, the authorities then demanded bribes. No soil test was carried out by the authorities even though the locals claimed that the soil was unsuitable for growing cotton.⁹⁶

In October 2008, villagers in Magwe's Myayde Township reported that they were forced to grow sugar cane by a local military officer, on land unsuitable for growth of this crop. Troops were also deployed to ensure the farmers obeyed the orders.⁹⁷

On 16 December 2008, it was reported that authorities in Nyaunglebin district, Pegu Division forced farmers to grow sunflowers and threatened to confiscate the properties of those who did not comply. Farmers were forced to buy 2 *pyi* of sunflower seeds per acre for the crop, which they feared would interfere with other plants already cultivated on their land.⁹⁸

On 23 December 2008, chairman of the Lahu Democratic Front (LDF), an ethnic armed militia group operating in southern and eastern Shan State, alleged that opium cultivation in the area had increased as a result of orders from SPDC military to cultivate the crop. The same authorities then collected tax from the villagers who were forced to grow poppy, Chairman Ailong Khammwe alleged.⁹⁹

9.6 Natural Disasters

In 2008 there were a number of natural disasters which affected the people of Burma. The most destructive of these natural disasters was Cyclone Nargis, which struck the southern coast of Burma, causing widespread destruction across the Irrawaddy delta and southern Rangoon Division. It was described as *“the worst natural disaster in the history of Myanmar, and the most devastating cyclone to strike Asia since 1991.”*¹⁰⁰ The death toll was estimated at over 130,000, and a further 2.4 million people were affected, many left without shelter, food, and other basic needs.¹⁰¹ Crops, homes, infrastructure and livelihoods were destroyed as a result of the cyclone. The inundation of rice fields in particular, resulted in an increase in the price of rice throughout the country, as the Irrawaddy region had until that time been responsible for 30 percent of the total rice production within the country.¹⁰² (For more information, see Chapter 10: Cyclone Nargis – From natural disaster to human catastrophe).

Pollution as a result of the devastation caused by Cyclone Nargis was also a cause for concern in 2008, with reports of sewage waste contaminating groundwater supplies, and salinisation of water reservoirs in the aftermath of the cyclone.¹⁰³ With no alternative drinking water available, cyclone victims drank the polluted water, putting their health at risk from diseases such as cholera and typhoid.¹⁰⁴

In July 2008, a study was released which showed that the Irrawaddy Delta region faced high risk of arsenic contamination in groundwater after the cyclone. This contamination could cause cancer and other diseases in residents of the area.¹⁰⁵

Apart from the cyclone, there were reports of severe flooding in many regions of the country, with the Chindwin, Sittaung and Pegu rivers in Pegu Division bursting their banks in July 2008, flooding villages and farmland as a result of heavy rains.¹⁰⁶ During the same time period, there were also incidents of flood-induced damage to crops, roads and bridges in Arakan state.¹⁰⁷ Fatalities resulting from floods and landslides were also reported in Kachin State, Pegu Division, and in the Palaung region of Shan State.¹⁰⁸

Earthquakes also occurred in 2008, with the Chinese border regions in Kachin State experiencing the majority of these quakes. A mild earthquake also hit Rangoon on 5 September 2008.¹⁰⁹

In January 2008, a volcano erupted on Sai Chung Island in Arakan State, causing many locals to flee the area because of lava and ash overflow from the volcano.¹¹⁰

In June 2008, 11 people, including two children, were killed and several houses destroyed as a result of a landslide, brought on by heavy rain in Mogok Township in Mandalay Division.¹¹¹

In July 2008, 30,000 acres of farmland were flooded when an embankment burst due to heavy rain, in Pegu's Nyaunglebin Township, south of the Sittaung River. Locals said that inadequate drainage had worsened the situation, and that authorities had done nothing to offer assistance, although they had visited the flooded areas.¹¹²

In July 2008, 5 people were killed in the Laizar (Liza) area of Kachin State when Laizar creek burst its banks. The same area was hit by four earthquakes in April and May 2008.¹¹³

On 30 July 2008, at least 15 people were reported killed in a landslide caused by heavy rain in the jade mining area of Hpakant in Kachin state. Locals said that fatal mine collapses and accidents caused by controlled explosions were frequent occurrences in the area.¹¹⁴

On 8 August 2008, a tropical storm hit Mudon Township in Mon state and destroyed at least 20 houses. The worst affected villages were: Set-thawe, Ah-bit and Kyaik ywe.¹¹⁵

On 16 August 2008, six people died, including one child died in a landslide in Mogok Township in Mandalay Division.¹¹⁶

In September 2008, an increase in invasive freshwater snails was observed in the wake of cyclone Nargis. According to local farmers, the snails fed on young rice seedlings and destroyed much of the paddy planted after the cyclone.¹¹⁷

In September 2008, 5 villages in Sagaing Division were flooded when the Irrawaddy River burst its banks. The villages affected were south of Mingin Township including: Thayetpinseik, Letpan, Htantaw, Kyethaung and Ahlaung villages. Officials denied that there were floods in the area.¹¹⁸

In November 2008, water shortages for survivors of Cyclone Nargis were reported. In the village of Shaw Chaung, water ponds remained contaminated with salt despite numerous efforts by villagers and the United Nations Development Programme to pump out the salt water.¹¹⁹



May 7, 2008



May 3, 2002

Before and after satellite images of a small unidentified village located 27 kilometres (16 miles) south of Rangoon in Irrawaddy Division. The top image, taken on 7 May 2008, shows the devastation caused by Cyclone Nargis, while the lower image shows the same village six years earlier. The top image clearly shows the inundation of the rice fields and the utter destruction of the village and all of the trees which lined its few streets. [Photos: © Geoeye/CRISP-Singapore]

9.7 Other Factors Resulting in Environmental Degradation

Fishing and Shrimp Farm Projects

Unsustainable fishing methods are another of Burma's environmental problems, with a depletion of fish stocks being noted in Arakan State in 2008. According to local fishermen, there has been a vast increase in the hauls taken by foreign fishing companies in recent times; the sizes of which have not been regulated by Burmese authorities.¹²⁰ It was reported in August 2008 that increased amounts of shrimp farms were having a negative influence in areas of Maungdaw Township in Arakan State. The greater numbers of farms began in the late eighties as shrimp farming was seen as an alternative source of income and was heavily supported by the SPDC who were keen to receive tax revenues from the farms. Unfortunately the dams required for the farms have eaten into the areas which were previously used for paddy farms, resulting in lower yields of rice and ensuing food insecurity in the region. Farmers in Maungdaw have complained that their paddy fields have been salinised by leakage from shrimp dams, making the paddy fields unusable.¹²¹

In May 2008, villagers in Maungdaw, Arakan State found that an informer in Burma's border security force had channelled salt water through canals for his shrimp farm. The saline water seeped into the villagers' arable land, making 30 acres of land unfit for paddy cultivation. The villagers did not go to the security forces for fear of reprisal.¹²²

Mautam, Rats and Food Insecurity

The year 2008 saw plagues of rats descend on villages in Chin State in Burma, as the bamboo forests flowered. This blossoming of the bamboo flowers, technically known as *Mautam* (after the Bengali word meaning 'bamboo death'), only occurs once every fifty years. As the flowers wither, the rats eat the seeds; the abundance of the food source leads to an explosion of the rat population which then turns on farmer's crops following the depletion of the bamboo flowers. In Chin state, the villages of Weibula, Mualzawl, Thlawrzawm, Ralum and Kawifang in Falam Township were those worst effected by the rat plagues. The droves of rats invaded fields, destroyed crops and grain, leaving many villages without food, despite villagers in these locations killing up to one hundred rats per night. The Chin Human Rights Foundation estimated that up to 100,000 people were affected by food shortages in Chin State, a situation exacerbated by the rat plagues.¹²³

Threats to Biodiversity

Threats to wildlife are another cause for concern for the rich biodiversity that exists in Burma. Trade in tiger parts in Burmese markets in Rangoon and along the border in Three Pagoda Pass, Taichilek and at Kyaiktiyo in Mon State continues, putting the tiger population at risk.¹²⁴ It is relatively easy to purchase bones, skins and claws at these markets, with roughly half the produce coming from species that are banned in international trade.¹²⁵ In addition, deforestation, both for logging and land clearance for dams and other projects, has destroyed habitats and depleted wildlife in many areas.¹²⁶ Although the Burmese authorities have officially pledged to protect the wildlife of the country in some areas where the ecosystems are under threat, environmental impact assessments are rarely considered when a new dam or similar project is planned.

In April 2008, it was reported that two orchid species were now extinct in Burma. The species, Rainbow Orchid and the *Hirsute Paphiopedilum* were discovered in the valleys of Putao and Nagmung in northern Kachin State some 20 years ago. No reason has been cited as to the cause of this extinction in Burma, but demand for certain herbal remedies in China was cited as a possible factor.¹²⁷

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The Human Rights Documentation Unit (HRDU) is the research and documentation division of Burma's government in exile; the National Coalition Government of the Union of Burma (NCGUB). The HRDU was formed in 1994 to document the human rights crisis confronting the many and varied peoples of Burma, and to defend and promote those internationally recognised human rights that are inherent and inalienable for all persons irrespective of race, colour, creed, ethnicity or religion. To this end, the HRDU published the first *Burma Human Rights Yearbook* in 1995 to comprehensively document the systematic and egregious nature of the human rights abuses being perpetrated in Burma throughout the previous year. This report, the *Burma Human Rights Yearbook 2008*, represents the 15th annual edition of the *Burma Human Rights Yearbook*, which, combined with all previous editions collectively comprise well over 10,000 pages of documentation and provide an unbroken historical record spanning the past one and a half decades.

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