

Russian-backed Mining Project Threatens Pa-O Communities in Shan State, Burma



Published in June 2009

Contact: pyohq@yahoo.com

The Pa-O Youth Organization (PYO) was set up on 4th December, 1998 by monks, women and youth who came from various places in the Pa-O areas in Burma. PYO is a member of the Students and Youth Congress of Burma (SYCB) and the Nationalities Youth Forum (NYForum). It is a non-violent independent youth organization striving for peace, justice and democracy in Burma.

The main aims of PYO are:

- 1. To establish a new society based on the principles of peace and justice.
- 2. To empower Pa-O youth, build greater unity among the Pa-O people and nurture younger generations to become future leaders.

The main objectivies of PYO are:

- 1. To promote Pa-O literature and culture.
- 2. To promote quality critical thinking of Pa-O youth.
- 3. To educate the people in Pa-O areas regarding human rights and the environment.
- 4. To help build a federal union of Burma with equality and self-determination.

Fund sponsors

Daniel Clark Memorial Fund (DCMF) Burma Relief Center (BRC) ERS-Mekong Alumni Program

Front cover photo

(Above): View of Mount Pinpet and the surrounding areas in December 2007

(Below): Pinpet iron factory under construction in February 2009

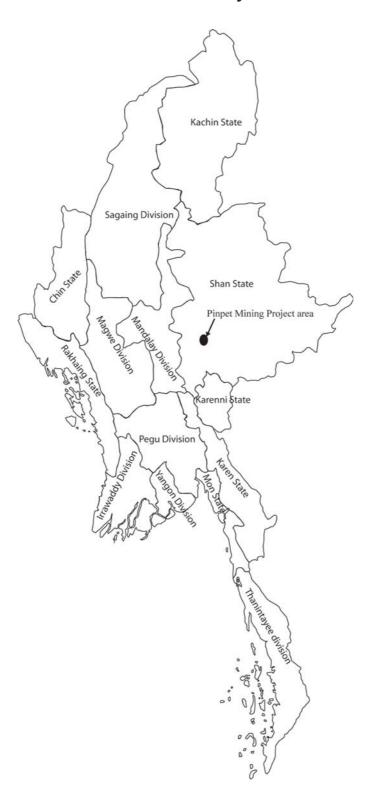
Back cover photo

Local farmers husk rice after harvesting. Photo taken in December 2007

Contents

MAP OF BURMA & PROJECT AREA	iv
EXECUTIVE SUMMARY	. 1
INTRODUCTION	3
Methodology	4
PART 1: THE PROJECTS	5
General Background	. 5
History of mineral exploration	. 5
Local community and livelihoods	
Project components	. 9
Map of projects	. 8
Pinpet mining	. 9
Pinpet iron factory	10
Pinpet cement factory site	14
Suspicions of uranium production	15
Burma Army militarization of the project area	16
Companies involved	17
PART 2: LOCAL COMMUNITY IMPACTS	19
Forced Relocation and Displacement	19
Land Confiscation and Destruction of Property	
Loss of Livelihoods	23
Travel Restrictions	25
Increased Vulnerability of Women	26
Food Insecurity and Fuel Shortages	26
Cultural Destruction	28
Environmental Impacts	30
Complaints not Addressed	35
CONCLUSION AND RECOMMENDATIONS	36
To local communities	36
To the State Peace and Development Council	36
To regional and international communities	37
To the Russian Government	
To Companies Involved	41
APPENDIX	41
Population around the base of Mount Pinpet	
List of the families who were forced to relocate	
List of confiscated lands	

MAP OF BURMA & PROJECT AREA



EXECUTIVE SUMMARY

The transformation of Mount Pinpet, or "Pine Tree Mountain," in Burma's war-torn Shan State, for the excavation and refinement of the country's second largest iron ore deposit is changing the very nature of life there, and if not stopped could permanently destroy the home of more than 7,000 primarily ethnic Pa-O residents.

Since 2004 Russian and Burmese companies have been preparing to develop the deposit and are currently building an iron processing plant and a cement factory on a total of 11,000 acres of lands. An Italian company is also believed to be involved in the project.

Although there has been a ceasefire in the area since 1991, the military ruling Burma has established three sizeable battalion camps and two military universities in or around the nearby towns of Taunggyi and Hopone. Fighting has flared up south of the project site and has led to recent torture and killing of villagers by the Burma Army.

Twenty-five villages, a total of 7,000 people, could be permanently displaced from their homes and farmlands by the projects. A further 35,000 people rely on the watershed of the Thabet Stream in the valley east of the mountain.

Fifty people have already been forced to move and were not adequately compensated. The confiscation of vital farmlands has begun, leaving over 100 families without the primary source of their livelihood and sustenance. Travel restrictions have closed down a major road and prohibited villagers from collecting firewood, food, and shelter materials on the mountain.

The entire mountain of Pinpet will be excavated for this project, irrevocably changing the landscape and environment of the area. Pollution from mine tailings and erosion of mine heaps threaten the main water source of Hopone Valley. Ancient pagodas have been cracked and may be demolished altogether by explosions to prepare construction sites and begin excavation.

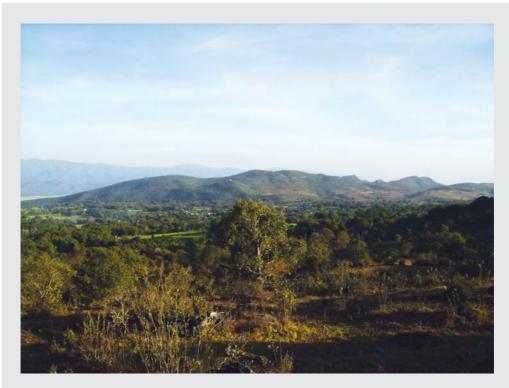
Local communities have not been informed or consulted about project plans and complaints to authorities about the confiscation of lands and lack of compensation have not been addressed. No assessments of the projects have been made public and mining authorities are pushing ahead by using the force of armed local military to relocate families, confiscate lands, restrict movements, and intimidate communities.

The lack of information is compounded by persistent speculation that the mining operation is in fact being set up to exploit and refine uranium, not only iron ore and limestone.

These fears are fueled by Burma's announcement in 2007 that Russia is to build a nuclear reactor in the country.

The companies responsible for these projects should stop all activity and first conduct thorough and transparent assessments of the projects' environmental and social impacts; adequate compensation should be provided for those who have already lost their homes and lands; to assuage fears, all nuclear and uranium mining plans should be made public; and, such projects should not be conducted under the force of military power.

The Pa-O Youth Organization stands with its community to protect livelihoods, land ownership, and cultural heritage, and calls on regional and international actors to inspect the Pinpet projects and use their influence to ensure respect for the rights of affected communities.



Mount Pinpet

Mount Pinpet was originally called "Pinngo" in the Pa-O language, and it literally means "pine shadow," or, a place with pine trees that provides shelter for travelers. "Pinpet" is the name of mountain today, and it is pronounced in Shan as Pangpek, meaning Pine Forest. The place "Pinpet" can also be found as Pengpek, Pangpet, or Pinngo but for this report only the word Pinpet will be used.

INTRODUCTION

In 2004, the Pa-O Youth Organization began hearing concerns from fellow community members about the commencement of an iron ore mining operation and factories at Mount Pinpet, an iconic landmark for the Pa-O just ten kilometers south of the Shan State capital Taunggyi. Over the next few years, villagers became increasingly alarmed about the influx of workers from central Burma, the arrival of Russian personnel together with top military generals, and rumors of uranium deposits in the mountain. Public information about the projects, like many in military-ruled Burma, was extremely limited, however. The organization therefore undertook a three-year investigation into the parameters of the projects, their unfolding impacts, and the potential threats to the surrounding community. This report is a result of that investigation.

Two factories, one for processing iron ore and another for producing cement, are currently under construction. Upon completion, excavation will begin and continue until the entire mountain is mined out. Seven thousand people living at the base of the mountain are in danger of permanent displacement and a further 35,000 living in the watershed of a local tributary of the Pawn River are in danger of negative environmental impacts. Preliminary relocation, the confiscation of lands, and the loss of livelihoods and natural resources have already impacted hundreds of families. As the projects progress, villagers expect additional problems from pollution, food shortages, and increasing loss of land, homes, and cultural heritage. Yet the local community were not informed nor allowed to participate in decision making regarding the projects and their appeals for proper compensation and equitable treatment have been ignored.

This is not an unusual story in Burma, also known as Myanmar, which has been ruled by military juntas since a coup in 1962. Consistently ranked as one of the poorest countries in the world, Burma has been suffering from the effects of dictatorship and civil war for decades. Though several armed groups have signed ceasefire agreements with the military government, active fighting still rages in parts of Burma's border areas, which are inhabited largely by ethnic nationalities.

The current government of Burma, the State Peace and Development Council (SPDC), took power in a 1988 coup. Since that time the military junta has faced international scrutiny and condemnation for repeated crackdowns on protesters, and the arrest and imprisonment of Daw Aung San Suu Kyi, Khun Htun Oo and pro-democracy activists and ethnic leaders.³

Since the opening of the country to foreign investment in the early 1990s, large scale development projects and resource extraction in Burma have resulted in human rights violations by the Burma Army such as forced labor, rape, forced relocation, land

confiscation, murder, and torture, as well as environmental destruction, often in ethnic areas.⁴

Following a people's uprising led by the country's monks in September 2007, the junta's harsh crackdown prompted criticism from the United Nations, the Association of Southeast Asian Nations, and many foreign governments. These criticisms were intensified by the junta's mishandling of the aftermath of the May 2008 Cyclone Nargis and repressive tactics associated with the government's constitutional referendum that same year.

The PYO hopes that with this report an area of Burma that is not often in the news will come to the forefront and that the abuses and impacts of the projects at Mount Pinpet will be exposed at last. First and foremost we stand with our community to protect and preserve our livelihoods, land ownership, and cultural heritage. We urge regional and international actors to closely monitor the projects at Mount Pinpet, particularly in consideration of the suspicion of uranium mining there. Finally, we call on the involved companies and agencies to stop all activity and first conduct thorough and transparent assessments of the projects' environmental and social impacts, and provide adequate compensation to those who have already lost their homes and lands.

Methodology

The PYO collected data, including village populations, project details and diagrams, photographs, and villagers' stories, in the Mount Pinpet area from 2006 – 2009. Primary research was obtained by gathering information from people living in the Hopone and Taunggyi areas, as well as people who had worked and are now still working on the projects. In-depth interviews were conducted with thirty-six villagers from ten villages at the foot of Mount Pinpet who have been affected by the project. At the same time, information was also received through group discussions, informal meetings and workshops with local villagers. Secondary research was gathered from online commentary and news sources. All interviews are on file with PYO.

PART I THE PROJECTS

General Background

Mount Pinpet is located in Shan State, the largest state in Burma, with a total area of over 60,155 square miles and an official estimated population of over 5 million.⁷ It is also one of the most ethnically diverse states, home to dozens of ethnic nationalities including Shan, Pa-O, Intha, Danu, Palaung, Wa, Lahu, Taung Yo and Kayan.

The majority of the 7,000 people living around the base of Mount Pinpet are members of the Pa-O ethnic nationality. The Pa-O, with a population of just over 1 million, is the second largest ethnic nationality in Shan State. The Pa-O live primarily in southern Shan State, but substantial populations can also be found in Karenni State, Karen State, Mon State, and Pegu Division. Most Pa-O make their living as farmers, growing a variety of crops such as rice, cheroot leaves, garlic, tea, corn, and peanuts. The majority are Buddhists, and retain their distinctive culture with their own language, literature, and dress. 9

Decades of civil war in Burma have taken a toll on Shan State, with active fighting continuing in some parts of the state while other areas are under the ostensible control of ethnic cease-fire groups. The main Pa-O ceasefire organization is the Pa-O National Organization (PNO), which reached an agreement with the SPDC in 1991. Large areas of southern Shan State, including Hopone Valley, the location of Mount Pinpet—are in PNO territory. Practically, however, the PNO areas have been under the control of the SPDC since the 1991 agreement.

The only Pa-O armed group actively fighting in 2009 is the Pa-O National Liberation Organization, located in far southern Shan State near the Karenni border. The Shan State Army South is also currently active. In May 2009 fighting flared up south of the project area, resulting in the arresting, torturing, and killing of villagers by the Burma Army. ¹⁰

History of mineral exploration

Located 7 miles southeast of Taunggyi, the capital of Shan State, Mount Pinpet covers an area of approximately 8 square miles and stands 1,400 meters above sea level. It has a long history of attempts to develop its mineral resources and contains the second largest known iron ore deposit in Burma, after a site near Hpakant, Kachin State. Mount Pinpet is rich in other minerals including copper, limestone, wolfram, and tin; the presence of uranium on the mountain has also long been suspected but not officially made public. 12

Exploration began soon after Burma's independence, with iron ore deposits discovered

in 1951.¹³ After a ten year period of inactivity due to the instability caused by various uprisings, exploration was restarted in 1961. According to a local villager, "[a]t that time, geologists and scholars from Germany, Russia and Italy came to resettle in Taunggyi nearly one year ... During that time Japanese scholars also came to study and observe the Pinpet areas." ¹⁴ Two underground tunnels were begun in the western and northeastern portions of Mount Pinpet, but construction was never finished. ¹⁵ Activities again stalled in 1962 after Burma's first military coup.

A second attempt to excavate iron ore at Mount Pinpet began following the PNO ceasefire agreement in 1991. In 1992, Burma Army battalions were sent to secure the area. Communications Battalion No. 212 confiscated and occupied land in Mai Toung village, located between Mount Pinpet and Taunggyi. Near Hopone, northeast of Mount Pinpet, 25,402 acres of land were confiscated by Regional Command Central Battalion No. 3. Though soldiers were then in position to secure the area and move forward with excavation, activities once again stalled, this time due to lack of funds.

Since 2003 a third attempt to excavate minerals from Mount Pinpet has been moving forward (see Project Components). Officially the current plans are for iron ore extraction but there are suspicions among local villagers that uranium will also be mined at Mount Pinpet, in line with Burma's recently announced nuclear ambitions and partnership with Russia.

Local community and livelihoods

The area surrounding Mount Pinpet is known as the Hopone Valley, which runs east of Taunggyi and includes Hsi Hseng, Hopone and Taunggyi townships, as well as the town of Hopone to the north of Mount Pinpet. Thabet Stream (known as Jamphak Kroung in Pa-O) runs through the center of Hopone Valley, which is home to an estimated 35,000 people in approximately 100 villages.

Thabet Stream runs southward directly adjacent to Mount Pinpet for approximately 100 miles before flowing into the Pawn River, a tributary of the Salween, on the border between Shan State and Karenni State to the south.

The majority of the villagers near Mount Pinpet are members of the Pa-O ethnic nationality; several ethnic Shans and Indians also live in the area. At the base of Mount Pinpet, over 7,000 people live in 25 villages. Villagers earn their living by growing various kinds of seeds and vegetables, such as rice, garlic, sesame, wheat, beans, corn, potatoes, strawberries, peanuts, and sugarcane as well as raising cattle and chickens. Farm products are sold in the cities of Taunggyi and Hopone. Villagers also hunt and gather products such as bamboo and mushrooms in forests on Mount Pinpet and fish from Thabet Stream.



Pa-O women marching on the main road, celebrating Pa-O National Day in Taunggyi in March 2008

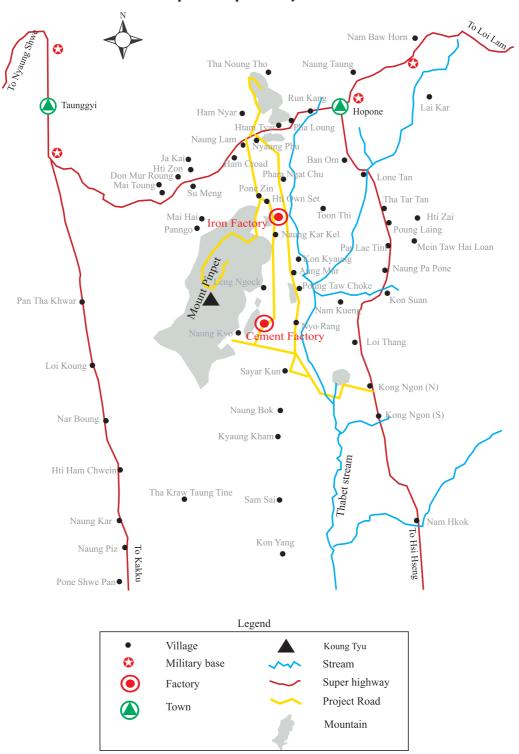


A farmer washes his animals in Thabet Stream next to paddy farms



Fresh produce from farms at the base of Mount Pinpet

Map of Pinpet Project Area



PROJECT COMPONENTS

Pinpet Mining

The Pinpet deposit consists of estimated reserves of hematite at 10 million tons with 56.4% iron and reserves of limonite at 70 million tons with 42.6% iron (the best grades of iron in the world contain 60% iron). In addition, the mountain also has a deposit of an estimated 30 million tons of limestone, which can be used to make cement. Government media reports indicate that the iron ore will be extracted via an open-pit mine.

Construction of a road on the upper west part of the mountain that began in 2006 is now complete. The road leads to two underground tunnels that are abandoned sites from exploration done in the 1960s. Workers have cleared the land of trees and underbrush around and between the two old sites, presumably preparing this area for the first open pit. A security hut for soldiers is based on the mountain near these sites. There is an ancient pagoda nearby these sites as well. Soldiers have placed posts along the north and eastern sides of the mountain marking the area as a "military area," angering local villagers who used to collect food and firewood on the mountain.

Villagers collecting firewood or forest products on the mountain began encountering soldiers based on the mountain in 2006 and were forced to pay bribes to keep their harvests. As time went on, more and more villagers started asking what kind of mine they were developing as so many soldiers were present. After such speculation, since 2007, soldiers on the mountain and at the iron factory site changed their uniforms to plain clothes.

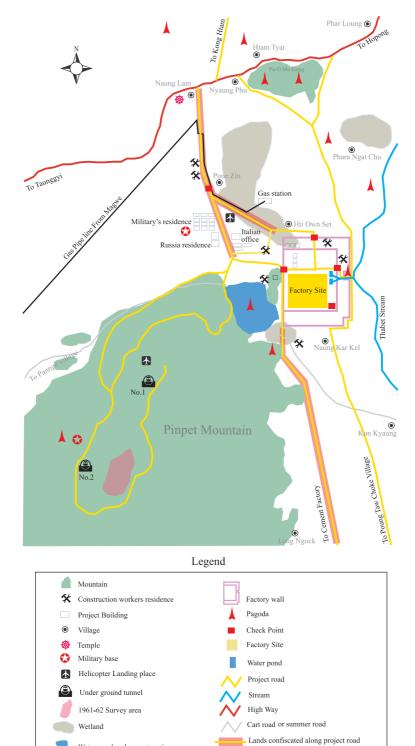
It is understood that the actual excavation will not begin until the iron factory is complete.

Processing Iron

Hematite and limonite are two mineral sources from which iron ore can be obtained. After extraction, usually in an open pit mine, the ore is crushed and sorted. Lesser grades undergo "benificiation" to remove contaminants; this is a refining process that can involve washing, magnetic separation and other techniques. The ore is then loaded into a blast furnace where it is transformed into pure iron. This iron is further processed to make steel.

During beneficiation - which requires huge quantities of water - tailings, or ground rock particles, are disposed in slurry form. The slurry is usually conveyed to a tailing pond and whenever possible recycled. Sometimes, however, water from the tailing pond is released into nearby waterways, polluting the surface water with heavy metal contaminants that accumulate downstream.¹⁷

Map of Pinpet Iron Factory



Water pond under construction

Pinpet Iron Factory

After several false starts, the Pinpet Iron Factory, located at the base of the mountain on its eastern side, began construction in 2004. Some news reports put the expected completion date at 2009 while others do not specify. The ore will be refined at the factory before being further processed into steel. Local sources indicate that the steel will be made at the facility in Pinpet while trucks working on construction have signs saying "Pinpet iron and steel." Some media reports indicate that the refined ore will be sent to a steel mill in Mandalay Division currently under construction that will have the capacity to produce an estimated 200,000 tons of cast iron per year. 19

Burmese media reported that in January 2009 the factory received a new boiler;²⁰ photos taken by PYO indicate that as of March 2009, two holding ponds, a series of underground bunkers, and residential compounds for military personnel, Russian residents, and workers, have been completed. A tower-shaped structure was still under construction (see map and photos). Thabet Stream has been dammed and water is being diverted to and stored in two ponds inside the factory compound.²¹

The factory is surrounded by heavily guarded 10-foot high double walls set 50 yards apart; between the two walls there is an additional fence. Ground Engineer 903 Battalion based in Hopone, Yabaka (Eastern Command) based in Taunggyi, and the Regional Commander Training Central Battalion No.3 based in Hopone all take responsibility for security of the factory. The number of soldiers fluctuates according to the situation; for example when a military general is visiting or in the case of active fighting, such as that which broke out in May 2009, more soldiers are mobilized. There is a security hut within the factory walls and a residential military compound next to the factory (see map). Since 2007 soldiers taking security of the factory have dressed in plain clothes.

"At the beginning when they came to set up the iron factory, they only built one wall around the site. Later, they extended the factory area, and eleven houses in Naung Kar Kel village, as well as cheroot and corn plantations, were destroyed to make way for another wall." ²²

Reports indicate there will be various sources of power for the factory. Construction of a natural gas pipeline from Magwe division, central Burma, to Mount Pinpet is complete, and can transport 8 million cubic feet of natural gas, producing 20 MW of electricity.²³ The state-run New Light of Myanmar, however, has reported that Pinpet is to be supplied with power generated at a 54-MW hydropower station at Kengtawng Falls which was officially opened in January of 2009.²⁴ Transmission lines from Taunggyi to Pinpet were in place as of May 2009. It has also been reported that the facility will have a commercial-scale coal-powered generator that produces 65 megawatt of electricity. The coal will be transported from Tigyit coal mine, Burma's biggest coal mine located about 22 miles

south of Kalaw town in southern Shan State.²⁵

In 2006, the Russian state-owned company Tyazhpromexport announced an agreement to provide USD 150 million in equipment for the project.²⁶ Villagers report seeing Russian workers at the site since 2006²⁷ and four Russians are currently living at a residential compound near the factory (additional staff come and go). Across the road from the Russian residence is what villagers call the "Italian office." While Italians have yet to be based at the factory, PYO believes that the company is Danieli of Italy (see Companies Involved).

The factory will be Burma's second facility that processes iron. Currently the only such plant in Burma is the state-owned No 1 Iron and Steel Plant at Anisakhan near Pyin-U-Lwin (Maymyo). The ore smelted at Anisakhan is obtained from an open pit mine at Kyat-win-ye about 40 km to the southeast near the border with Shan State. The Anisakhan plant was built by Danieli in the early 1980s and is currently being upgraded locally, reportedly to double production capacity up to 50,000 tons a year.²⁸



Russian and Military Officers' residences at the foot of Mount Pinpet. Photo taken in December 2007



Construction inside the iron factory site. The wall around the site (in the background) has just begun to be built. Photo taken in December 2007



Looking east from the construction site of the iron factory. The pagoda in the upper right corner lies just outside the double wall around the factory. Photo taken in February 2009



Pinpet iron factory under construction in February 2009



Transmission lines from Kengtawng hydropower station to Mount Pinpet. Photo taken in May 2009



Kanbawza's office at the cement factory site

Pinpet Cement Factory

In 2007 a survey office was built in preparation for the construction of the Pinpet Cement Factory, located on the southeastern side of the mountain between the villages of Naung Kyo and Poung Taw Choke and three miles from the iron factory. A field visit in 2009 showed that there was little progress on the factory, however; only a signboard and flags marking the area for the factory were in

place. The plot of land is estimated at 4,000 acres. ²⁹ Local residents say that the company is experiencing financial trouble and so the construction has stalled. Once operational it is projected to produce approximately 56,000 bags of cement per day.

Pinpet Cement Factory is a project of the Burmese Kanbawza Development Co. Ltd., which has invested USD 60 million.³⁰ The factory is scheduled for completion in August 2010, though local workers have expressed doubt that this deadline will be met.³¹

Map of Pinpet Cement Factory Site



Suspicions of uranium production

Burma's Ministry of Energy has officially announced five uranium deposits in the country, but there have been no public reports of these deposits being mined as of yet. While the five sites do not included Pinpet, several sources have indicated the presence of uranium near Taunggyi and there is persistent speculation of uranium on Mount Pinpet.³² According to local villagers, uranium is located southwest of the village of Leng Ngock on the mountain. The area is called "Kong Tyu" or "Sharp Mountain" located at approximately between 20°42'13.33"N 97° 6'12.13"E and 20°42'43.27"N 97° 7'40.24"E³³ (see map of Project Area). A military camp has been set up on the mountain, and villagers are prohibited from entering the vicinity, even to collect firewood.

Several villagers also reported that project servicemen from the iron factory told them that there is uranium in the area and that the factory will be used to process both iron ore and uranium. ³⁴ Said one, "As far as I know the Pinpet projects include uranium. I heard that from the project staff." The same villager reported that one Russian living at the site is a uranium expert. ³⁶

On May 15, 2007, one year after Russian state-owned Tyazhpromexport announced its support for the Pinpet Iron Factory, Russia's atomic energy agency, Rosatom, announced that it had reached a deal for "cooperation in the design and construction in Myanmar of a centre for nuclear research ... include[ing] a nuclear research reactor." Since this initial announcement, however, there has been no public news about the status or location of the reactor.

The lack of public information about the mining of uranium, any import of uranium, and the status of the nuclear reactor are all fueling local speculation that there is more to the Pinpet projects than just iron ore and cement. Villagers are extremely worried and fearful:

"I think it is not possible for me to have a chance to work in that factory, because I heard that they will build something nuclear. I heard they (government) sent students to study (nuclear) in other countries. I can not do anything in that factory; I only know to work in the farm....If they really work on uranium, we will have big problems...our village will have to move to a safe place." 38

Although PYO has not yet been able to confirm the excavation of uranium at Mount Pinpet, further investigation is warranted.

Burma Army militarization of the project area

Since 1991, the Burmese military has increased its troop levels in Hopone and Taunggyi townships around Pinpet Mountain, establishing five military installations where there used to be none. The town of Taunggyi is the headquarters of the Burma Army's Eastern Command.

In 1992, Communication Battalion No.212 set up a base in Mai Toung village between Taunggyi and Pinpet Mountain. In the same year, Regional Commander Training Central Battalion No.3 established a military training camp northeast of Hopone Town. In 2004, Ground Engineer Battalion No. 903 established a base near the same area.

Two military universities, the University of Computer and Technology Science at Mai Toung village and the College of Military Computer and Technology Science near Hopone, were established in 2004. Some officers from the universities work at Mount Pinpet. Some of the military officers who work in the College of Military Computer and Technology Science finished their studies from Russia and sometimes work at the factory. Said one villager: "Some military who finished their studies in Russia are working in this college. For example Bo Aung Tun Lay and Bo Zar Ni Min Piang, who have three stars on their shoulder."39

All of these military installations are within territory granted to the PNO under the ceasefire of 1991, making a mockery of the alleged control granted to the PNO in the agreement and in the 2007 National Convention.



Military Computer and Technology Science College, near Hopone

Companies involved

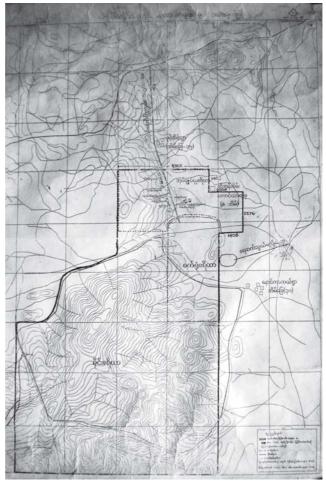
Due to the secrecy of the SPDC and its restrictions on information, obtaining reliable data regarding investments in the Pinpet projects is extremely difficult. From Burmese and international media, as well as local sources, PYO has been able to identify five companies involved in the projects: Tyazhpromexport from Russia, and Kyaw Tha Company Limited, Kanbawza Development Co. Ltd., Winner Super Diamond Co., Ltd., and the Myanmar Economic Corporation from Burma. PYO also believes that the Italian firm Danieli is involved in the project. Information about the exact nature of these companies' investments and/or control of the projects is currently limited (see below).

Tyazhpromexport

The Russian state-owned company Tyazhpromexport is providing support to the Pinpet Iron Factory, investing equipment worth USD 150 million.⁴⁰ Established in 1957 and based in Moscow, Tyazhpromexport is a Federal State Unitary Enterprise Foreign Economic Association with representative offices in 20-odd countries. It specializes in mining nonferrous metal ores and the export and import of equipment for facilities producing ferrous and nonferrous metals. Tyazhpromexport has built iron-andsteel facilities in India, Pakistan, Egypt, China and Cuba.⁴¹

Myanmar Economic Corporation (MEC)

The Myanmar Economic Corporation (MEC) is reportedly involved in the steel



Map of Pinpet Iron Mining Project

mill to which Pinpet iron will be sent. ⁴² Retired Major Than Htun, one of the top officers responsible for the iron factory, used to work for MEC. It is unclear whether MEC has

formed a joint venture with any of the other involved companies for the management of the project.

MEC is one of two companies under the Ministry of Defense that dominates key industries in Burma. The MEC is authorized to conduct business in almost any field of commerce and industry and is not bound by the laws that control other economic activities in Burma. MEC funnels revenue from private enterprise into defense spending; its activities are intended in part to build the military's resource base – enabling privileged economic treatment of army officers and their families.⁴³ In July 2008 the United States Treasury added the MEC to its sanctions list for providing support to a military regime that it says is "systematically oppressing the Burmese people."⁴⁴

Kyaw Tha Company Limited

Kyaw Tha Company Limited, a private Burmese company, is involved in the construction of the Pinpet iron factory. The company was established in 1992 and is currently based in Rangoon. The company is working on engineering and construction, manufacturing of pharmaceutical products, soaps and detergent in cooperation with the Ministry of Industry No.1. The company also exports agricultural products and teak and imports pharmaceuticals and chemicals.⁴⁵

Kanbawza Development Co. Ltd.

Kanbawza Development Co. Ltd. (KDC), a private Burmese business, has invested USD 60 million into the Pinpet Cement Factory. ⁴⁶ KDC is one of the investment project of Kanbawza Bank, which was established in 1994 in Taunggyi by U Aung Ko Win also know as Saya Kyaung. ⁴⁷ He is a powerful businessman and has very close ties with the SPDC Vice-Chairman General Maung Aye. ⁴⁸ Kanbawza Bank has invested in several areas, such as gems and mining industries, trading and distribution, and agroindustry development, to name a few. ⁴⁹

Danieli & C. Spa

Danieli is believed to be involved in the iron processing plant (the iron factory) at Pinpet. A large building across from the Russian residential area at the factory site is locally known as "the Italian section" and Italians have visited the site. Danieli has long been the only Italian company in Burma working on iron and steel. In 1979 Danieli signed a turnkey contract with Mining Company No. 3 for an iron and steel factory in Maymyo, including an arc furnace and steel casting equipment. In 2007 the company confirmed in a press release that they operate in Burma in the steelmaking industry but denied that they had any connection to the military industry or were supplying any products for armaments. Danieli is among the three largest suppliers of equipment and plants to the metals industry worldwide and has offices in several countries. Danieli Far East is based in Bangkok.

PART 2: LOCAL COMMUNITY IMPACTS

Local communities near Mount Pinpet were neither informed of nor allowed to participate in decisions regarding mining operations and the construction of an iron and cement factory. To date, information about the project plans and impacts have not been released to the villagers living near the factories or to the general public. Complaints of negative impacts from villagers have been dismissed.

Yet, since the beginning of construction of the Pinpet iron factory in 2004, the people of Mount Pinpet have endured forced relocation, land confiscation and property damage, loss of livelihoods, travel restrictions, cultural destruction, and food and fuel shortages. As the projects become operational, villagers expect to experience further problems from water and air pollution. The local community has yet to receive any benefit from the project, and does not expect to receive any in the future.

Forced Relocation and Displacement

The fourteen villages closest to the mountain, a total of 3,000 people, are in immediate danger of being permanently displaced from their homes and farmlands by the Pinpet projects. Fifty people have already been forced to move and were not adequately compensated (see below). The remaining 11 villages around the mountain, 4,000 people, will most likely be forced to move as excavation continues throughout the mountain. Approximately one hundred villages, an estimated 35,000 people, relying on the watershed of the Thabet Stream for subsistence paddy fields, face imminent threat from pollution to their main water source and may also eventually have to relocate.

Between January 2006 and March 2008, 16 families from 3 villages were forcibly relocated from Mount Pinpet. In all, more than 50 people lost their homes, without adequate compensation. Families were relocated from Naung Kar Kel village (January 2006), Gun Kaw village (January 2006), and Pone Zin village (March 2008). While those from Pone Zin village received no compensation at all, villagers from Naung Kar Kel and Gun Kaw received on average 200,000 kyat (appx. USD 200) and

"As farmers, what can we do if we don't have money to buy lands? In any area, any place, if we want the land, we have to buy it. We can not get it for free. So, what we are going to eat after they relocate us without compensation?"51

150,000 kyat (appx. USD 150) per house, respectively. This is completely inadequate for families to rebuild their lives, as a new farm costs more than ten times this amount, ranging from 2-3 million kyat.

Many residents of Pone Zin were forcibly relocated from their old village of Mai Toung fifteen years ago when Battalion 212 established a camp there, and now they face a second eviction. Local residents are extremely angry at this prospect. Some believe that the whole village will be relocated, but that authorities are trying to dissipate local anger by only evicting a few families at a time. The village is located on the main road to the factory and along the route of the gas pipeline that goes to the factory (see map).

Land Confiscation and Destruction of Property

"Now the government put flags on all the farms around our village... I think they're going take all the lands. I don't know what to do, and I don't know where to go. I only have land here."52

Over one hundred families have already lost 11,000 acres of vital farmlands due to the construction of both the iron and cement factories. Seven thousand acres represent nearly all of the land at the base of the mountain near the iron factory.⁵³ Between 2004 and 2008, at least 164 landowners from 11 different villages and towns had their lands confiscated for one of the two projects (see Appendix 3). Some of these landowners had relocated to the area 15 years earlier after their farms were confiscated in Mai Toung village.

Land between the two factories was also taken for a military camp. Most villagers have received no compensation, despite initially being offered 2,000 kyat (USD 2) per acre for their lands.⁵⁴ One victim was angered by the small amount of compensation offered: "It's crazy - if I could buy land with 2,000 kyat per acre, I would buy all the land in Burma!"55



Red flag on the farm indicates that it will be confiscated; the land owner is forbidden from working the land anymore. Photo taken in February 2008

In addition to farmlands, a cemetery in Pone Zin village was also confiscated by Taunggyi's Township Peace and Development Council (TPDC) chairman, Kyaw Zwa, and Pinpet mining authority officer, Aung Aung:

"They came and ordered us to close our cemetery and forbade us from burying any dead bodies there anymore. He said we have to use another place. Today [Feb 15, 2008] is the deadline." 56

In order to mark confiscated land, authorities use a flag system. If a yellow flag appears on the property, it means that the land will be confiscated but the owner can still work on it. If a red flag appears on the property, it means that they land has already been confiscated and the owner can no longer work on it. Landowners are rarely informed of the decision in person, and predicting when lands will be confiscated can be difficult. Explains one farmer:

"The area increased without documentation and without informing the land owners. They just put two kinds of flags, one is yellow color and another is red. Only then did we know the land would be taken." ⁵⁷

Villages have also seen their lands and crops destroyed for the factories. In 2004, twenty rice farms between Naung Larm village and Mount Pinpet were destroyed and used to build a new road, workers' residences, and office buildings.⁵⁸ In February 2006, crops on farms and fields between Hi Own Set and Naung Kar Kel villages were bulldozed before being harvested. Villagers received no compensation.



Image of a farm at the foot of Mount Pinpet that was bulldozed. Photo taken in December 2007



Pinpet Cement project seized 4,000 acres of land and farms between the village of Naung Kyo and Poung Taw Choke, at the foot of Mount Pinpet



Farm lands were confiscated for construction of this road from Mount Pinpet to Taunggyi. The red gas pipeline is to the right of the road.



The scar on the mountain is where land has been cleared in preparation for excavation. The village just below is in danger of falling rocks and landslides. Photo taken in May 2009

"I had bought the farm after saving money from when I worked as a teacher. I had been working on this farm only for three years, and just when the soil was becoming good to grow the plants, they came and took it." 59

Workers exploded a rock cliff on a hilltop near Poung Taw Choke village to use the stones for road construction. Before they could collect all the material, however, the rocks and stones tumbled down the hill into farm fields below. One farmer reported:

"The farms close to the cliff were totally destroyed. The rocks and stones came falling in to the farm. At the same time, the mine workers also went into the farm and stepped on the plants. There is nothing left now." 60

The utter disregard for the property rights was illustrated by the Chairman of the Taungyyi Town Peace and Development Council at a meeting in March 2008 when he announced that "the government owns all the land, water, and air, and you villagers only have rights to own 6 square feet of land." ⁶¹

Villagers report that migrant workers working on the factory and road construction also steal their crops at night, and there is nothing that can be done about it.

Loss of Livelihoods

"My life became so different after they took my land. Before I did not have any debt, and I did not have to worry about debt. I had my own fortune before." 62

Local villagers living near Pinpet Mountain mainly depend on farming for their livelihood. Their main sources of income are from selling crops from their farm. After losing their farms and lands to confiscation, hundreds of local villagers have no lands to work and have lost their income source at the same time as commodity prices are rising. As they have been farming their entire lives, it is a big challenge to survive because it is almost impossible to pick up a new type of work. Those that try encounter new challenges:

"Because of losing their farm, some villagers began collecting pine liquid and pine wood to sell for their income. Many of those are now in jail in Taung Lay Lone for illegally selling pine liquid and wood. The villagers do not have land to work on anymore, so they go and collect pine liquid, and then they get arrested." ⁶³

As the projects progress and more people are displaced, finding new farmlands and jobs will become an increasing obstacle.

No Jobs for Locals, Dangers for Migrants

"They only took two people from the local village, one works as a cook at the Russian officers' residence, and the other works as a house cleaner at the same place. Both of the workers already graduated from university. They said we would get jobs but you see how they already lied to us like this "64

During October to December 2006, military officers based at the iron factory compound distributed job application forms, saying that those from Hopone and Hsi Hseng townships would be favored for jobs. Those interested in applying had to pay 500 kyat for the application form if they went in person to the factory authorities or 1,000 kyat if they could not go in person. A lot of people applied for jobs, and the authorities collected thousands of kyat by selling the application forms. In the end, though, only one woman from Hsi Hseng Township was accepted for a job because she graduated from university with a Russian language major; she declined the job. 65 To date only two local villagers have been given jobs: as a cook and a housemaid.

Meanwhile workers have been brought in from other parts of Burma to construct the iron factory. Local villagers report that there have been several accidents already in construction activities, either for new roads or the iron factory.

"One machine that crushes rock killed seven people at the same time in 2007. They stayed above the machine but fell into it and were crushed to death. The people staying below did not know what had happened but later smelled something awful and went to look."66

"A lot of mine workers and construction workers came here from lower Burma. Some tie a rope around their waist on the side of the cliff and dig for rocks. Many died accidentally doing that; they got hit by the stones. The workers are replaced by a new group very often. They do not bury here when their workers died, they take them back to their home in lower Burma. At the Pinpet factory site, because a lot of workers died, they always play the sound of "Kamatan" (Buddhist chanting over a loud speaker). And sometimes, they also invite the monks to come to preach there."67



Travel Restrictions

"Now, we have a lot of problems to go to Taunggyi because the Pinpet mining factory is blocking the road, and we can not pass through in the night time anymore." 68

Villagers near Mount Pinpet are suffering from travel restrictions due to a gate recently placed at the entrance of the Pinpet Iron Factory. The gate blocks the main road, effectively preventing villagers who live in the six villages on the other side from crossing through unless permitted by security guards. The gates are only open from 6:00 am to 6:00 pm, which has caused problems for villagers who need to go through the gates at night for work, for selling crops at the market, or for reaching a doctor.

Villagers who attempt to pass through the gates after closing or without permission have faced abuse from security guards. In one incident in June 2008, a young man was beaten for driving through the open gate without permission. Later, another young man was detained and tied to the gates overnight after approaching the gates at night.⁶⁹

"The gate at the check point was open because some military high officers were coming through. That young man drove pass the gate because it was open. After that, the guard stopped him and pulled him down from the truck and beat him for passing the gate. He was unconscious for a while and then he was sent to the police station in Hopone. He later complained to the mining authorities at the factory, but they did not take any action." ⁷⁰

In addition, the road between Naung Kar Kel and Pinngo villages was also destroyed when they started building the pond outside the factory. Local people can not use it

anymore and instead now have to travel far out of the way to the main highway, which is unsafe for travel in bullock carts.

Increased Vulnerability of Women

The influx of male migrant workers and soldiers for the projects has made women fearful in Mount Pinpet communities:

"As there are more project workers, there is some sexual harassment to local women. My niece opened a small shop in my village near the mining areas, and the men keep following her wherever she goes....For now, we have to live with worry - we do not know what they are going to do to us. We just have to fear and are scared all the time. Especially, young women really fear about that all the time."71

A study of gold mining areas in Kachin State found that the combination of an influx of transient male workers to a mining area together with lack of jobs for women can lead to an increase in women turning to sex work that is often unsafe.⁷² As the loss of farmlands and consequently of livelihood strategies continues in Mount Pinpet, women will become increasingly vulnerable.

Food Insecurity and Fuel Shortages

Villagers from the 25 villages at the base of Mount Pinpet rely on the forests of the mountain to supplement their diets, provide herbal medicines, and to find materials for shelter and fuel. Collecting bamboo shoots, wild mushrooms, and herbal remedies is done in season and using a wealth of local wisdom. Hunting on the mountain for household consumption is also common. Gathering wood, bamboo, and rattan allows villagers to build and repair houses and have adequate cooking fuel.

When preparations for constructing the iron factory began in 2004, soldiers prohibited villagers from gathering firewood from part of Mount Pinpet and demanded payment from others who brought firewood from the mountain back to their homes.⁷³ Finding forest vegetables became more difficult as some areas were destroyed by the construction.

By 2007 all local village headmen around Mount Pinpet were given orders that villagers could not collect firewood or other forest products on the mountain anymore. Only one small area was left unrestricted but it is too far for many villagers to reach. Restricted access to the mountain has cut off the close dependence villagers have on the forests, resulting in food and fuel shortages. The permanent destruction of the whole mountain will irreversibly take away this resource from the people of Mount Pinpet.



Food grown at the base of Mount Pinpet and in the Thabet watershed supplies nearby markets like this one in Hopone



Local villagers collect mushrooms from the forests around Mount Pinpet



A local woman and her grandchild taking care of her peanut and corn farm near Mount Pinpet

"Training Battalion No 3 in Hopone did not allow the villagers to take firewood that they already collected from the mountain, and demanded 3,000 kyat from each villager if they wanted to keep their firewood. If the villagers did not give them 3,000 kyat of money, they [the soldiers] would take it away and sell all of it."74

In addition to losing their forest "market", factory workers and soldiers have stolen food from local villagers. Lost provisions include chickens, eggs, vegetables, and even a pair of shoes. 75 In April 2008, the night before General Maung Aye came to visit the factories, soldiers came to Poung Taw Choke village:

"[O}n 24 April, [YaPaKa Military command] from Taunggyi sent about 30 soldiers for security before Maung Aye came ... And that day, they came and asked for vegetables from our village; we the villagers gave them some. But the next day they did not ask, they just stole from us. About 15 kg of my garlic under my house was missing. The garlic of other villagers was also missing. They also stole 10 chickens from our village. They even stole the shoes of a young man in the village."⁷⁶

Though the villagers later made a list of the stolen provisions and asked for compensation, none was provided.

Once the factories and mine are operational, villagers fear that pollution from the mines could damage Thabet Stream, potentially making fish toxic and in turn destroying crops that depend on the stream for irrigation. If so, villagers would face further food shortages.

Cultural Destruction

In addition to the destruction of whole communities through displacement, restriction to traditional foods and medicines, and the loss of farm fields that taken together damage the "living culture" of the Pa-O of Mount Pinpet, historical cultural sites also face destruction. During March-April 2008, the Buddhist temple in Poung Taw Choke village and ancient pagodas on the hill at the foot of Pinpet Mountain were cracked from the impact of explosions for factory and road construction materials. Rocks and stones from the explosions crashed into the temple and spread over nearby farms.

Local villagers are concerned that the ancient pagoda War Taung Kham inside the iron factory construction area and about a dozen other ancient pagodas nearby are likely to be destroyed.



 $Local\ monks\ show\ temple\ walls\ cracked\ by\ explosions\ from\ mining\ for\ construction\ materials.$ $Photos\ taken\ in\ March\ 2008$



War Taung Kham Ancient Pagoda in Pinpet Mining Project area. Photo taken in January 2008

Environmental Impacts

"The drastic nature of the land disturbance during mining operations presents major public safety concerns as well as environmental problems resulting from wind and water erosion."⁷⁷

Loss of the mountain to open pits, irreversible change to landscape

Open pit mines radically alter the landscapes and ecosystems they are in, causing deforestation, loss of animal habitat, and massive heaps of unwanted material that can erode, becoming a landslide hazard and silting water sources. No plans for reclamation or revegetation for the Pinpet project, as required by Burma's Mining Law, have been made public. These quotes from mine workers in Hpakant, Kachin State, testify to the drastic changes due to open pit mines there:

"Hpakant used to be a green place with trees and bamboo. But these are all gone now and Hpakant is like a garbage dump. The Uru River is dirty all the time. Hpakant town which was once located on the mountain now floods every rainy season. Leftover soil from the mines flows through the whole town."78



Open pit mines for jade mining in Hpakant, Kachin State. Mount Pinpet may look like this one day if the project is not stopped.

"One of the biggest problems in Hpakant is where to throw the sediment from the mining... They throw it into the Uru River which raises the floor of the river making the river bank narrow and causing floods. In the rainy season sediment heaps which are higher than the village collapse and flow into the village, destroying houses." "79

Pollution

Water from the Thabet Stream has been diverted to two ponds inside the iron factory compound and a third larger pond is being built just outside the compound. It is likely the water will be used in the benificiation process (see box Processing Iron), and a slurry of tailings will be stored in the ponds. However, plans for using the water have not been specified publicly. More importantly, procedures for cleaning, reusing, or releasing the water have also not been disclosed. If untreated water and tailings are released back into Thabet Stream, it could pollute the entire waterway with heavy metals and/or un-extracted toxic sulfide minerals, impacting the watershed and accumulating downstream.

The iron mining itself also poses a risk to Thabet Stream. According to authorities, the mine will be an open-pit mine. This will involve dumping unwanted material in large heaps that then erode along with exposed hillsides. This eroded material makes its way, sometimes by dangerous landslides and floods, into creeks, streams and rivers, resulting in unnatural siltation.

Any pollution or siltation to the Thabet Stream will be devastating for the 100 villages in Hopone Valley which depend on the water source for their livelihoods. Villagers use the stream to fish, draw water for daily life, and irrigate their crops. Pollution from the mine could destroy fish stocks, endanger the health of villagers who use the water, and poison crops. Siltation would alter the riverine ecosystem and impact agricultural irrigation. In addition to potential pollution threats, any water diverted from Thabet Stream to the factories will decrease the amount available for use by local communities for daily use, navigation, and irrigation.

Villagers near Mount Pinpet also expect an increase in air and noise pollution from the excavation process and from trucks carrying iron ore and cement away from the factories. Given the SPDC's continued disregard for the well being of the community around Mount Pinpet, villagers have no reason to believe that the factory will use adequate pollution prevention technology.

Deforestation and watershed destruction

The government media reports that Pinpet mine will be an open pit mine. Workers have already cleared some forests on the mountain near the old tunnel sites where the first

open pit is likely to be, in preparation for excavation. Farms have been made into roads and local wetlands have been filled in and leveled. As the project progresses, more land will be cleared and trees cut down, inevitably impacting the watershed of Hopone Valley. Local communities preserve the forest and watershed by setting up spirit houses or "Lu Haw" at water sources, making them holy places. Logging, hunting and fishing activities, as well as washing clothes, showering or throwing rubbish are not allowed in these areas.

Several years ago villagers near Naung Kar Kel village, concerned about their water sources and environment, established a community forest area that was protected from any logging or destruction. They erected spirit houses to enforce the protected zone. When the factory construction began, however, the spirit houses were demolished and the community forest destroyed:

"When they (Project authority) came they just destroyed everything, they do not have any morality. They talk about the environment, but they did not do what they said. Old Pa-O people do not understand the meaning of the word "environment", but they grow and protect the trees and bamboo bushes, they also protect water inside the animal habitat not to dry out.... Near Naung Kar Kel village, the local people protect the trees on the mountain side. The trees were getting bigger, becoming thicker and darker, but the authorities came and destroyed everything."80

Several areas near the factory are part of a natural wetland that remains partially wet beneath the surface year-round. Many generations ago the land used to be a lake; today the lake is gone but the land is incredibly fertile and popular for growing vegetables and other crops. The wetland south of the iron factory is now dried up after trees were cleared and a nearby cliff face was blown up. At the same time, another wetland area northwest of the factory has been bull-dozed and filled up with soil for road construction and to accommodate factory workers. One small stream that naturally flows from Mai Hai village to Pone Zin village was blocked and diverted to the factory.



Construction of the factory pond blocked Thabet Stream and water has been diverted to the iron factory. Photo taken in March 2008



Local villagers taking a shower at Thabet Stream near Mount Pinpet in March 2007



Local villagers selling fish from Thabet Stream. Any pollution to the stream will impact the health and diversity of fish.



Bulldozers cleared farms and dumped soils over a local wetland area. Photo taken in February 2009



Local community spirit houses to protect the watershed. Such shrines have been destroyed in the construction process.



A community-made signboard marking a locally protected community forest that was later destroyed by project construction.

Complaints not Addressed

The confiscation of lands, inability to use important roads, and the destruction of spirit houses has created a deep resentment and anger among community members. Despite deep-seated fear of the authorities and limited language ability with Burmese, villagers have voiced their concerns. In January 2008 representatives from Pone Zin village went to Taunggyi to complain at the PNO office, the police office, the Township Peace and Development office, and the Shan State SPDC office about orders to relocate and close their cemetery. They implored the officials to intervene and stop the confiscation of lands. An officer at the TPDC said he would help them, but later informed the villagers that they had trespassed on government land and had to get out.

In April 2008 five village headmen went to complain at the TPDC office in Taunggyi about the road being blocked by the factory wall and demanded the road be opened. Eventually a bypass road was built but people lost their farmlands from the new road construction.

One villager summed up the current feeling of despair, the responsibilities of all involved in the project, and the necessity to stop the project before the impacts worsen:

"I told the officer of the project that, we the villagers did not disturb the project. We even help them with the food and vegetables, so why do they give problems to the villagers? I told them, 'you have the gun, and you have the bomb, we do not have any weapon, so we will just have to suffer whatever you destroy us.' After I told them that, they said they would compensate us, but, we did not see any compensation until now. The officer said that, 'we will give you only if the company (Kanbawza) gives us the money.'"81

"You see how bad the situation is already even though the factory is not built yet, so how is it going to look when the factory is built? It surely will get worse and worse."81

CONCLUSION AND RECOMMENDATIONS

Instead of benefiting from the extraction of their natural resources, the local communities around Mount Pinpet has suffered forced relocation, confiscation of farmlands, loss of livelihoods, travel restrictions, fuel and food shortages, and cultural destruction. As the projects progress, environmental impacts of drastic changes to the mountain, erosion and potential landslides, pollution of water sources and the air will further impact communities. The lives of those who make their homes at Mount Pinpet will be destroyed.

There is still time to stop the projects and to restore Mount Pinpet and its communities. The PYO makes the following recommendations:

To local communities:

- Be united in opposing policies and practices that are harmful to communities and communicate concerns to officers from the township, state, and central government authorities.
- Avoid signing documents to hand over lands and farms without suitable compensation or without clearly understanding the text and concepts in the documents.

To the State Peace and Development Council:

- Stop the policy of forced relocation and confiscating lands and farms from local people.
- Recognize and respect the rights of local traditional land ownership and customs.
- Stop the on-going project implementation and do not revive it without the full and fair consultation and participation of the local communities, the performance of full environmental and social impact assessments, and the guarantee that implementation can go forward without armed intimidation.
- Adequately compensate those who were forced to relocate, those whose land has already been confiscated and those whose properties were destroyed.
- Disclose all plans for uranium mining and the development of nuclear technology to the public.

To regional and international communities:

- International and regional non-governmental organizations should monitor the situation of the local community and pressure the SPDC to conduct and make publicly available Environmental and Social Impact Assessments for the Pinpet Project.
- The Association of Southeast Asian Nations, neighboring countries, and international governing bodies should use their position to pressure Burma to respect human rights and the rights of indigenous people.
- The International Atomic Energy Agency should closely monitor the SPDC's plans for uranium extraction and building a nuclear reactor.

To the Russian Government:

Monitor Russian state-owned enterprises and Russian investments to ensure that they are not complicit in abuses against local people.

To involved companies:

- We would like to encourage all companies involved in the projects to immediately disclose detailed information regarding their operations on Mount Pinpet to the public.
- Companies should acknowledge responsibility for any abuses, victims should be fully compensated and companies should ensure that additional abuses do not occur.
- Companies should stop the on-going project implementation and not revive it without the full and fair consultation and participation of the local communities and conducting full environmental and social impact assessments.

FOOTNOTES

- ¹ The military junta illegally changed the name of the country from Burma to Myanmar in 1989. This change is not recognized by those opposed to the military's continued rule.
- ² The United Nations classifies Burma (Myanmar) as a "least developed country," http://www.un.org/special-rep/ohrlls/ldc/ldc%20criteria.htm.
- ³ Situation of Human Rights in Myanmar: Report of the Special Rapporteur, Paulo Sergio Pinheiro (December 2004).
- ⁴ See for example "Human Cost of energy" and "Turning Treasure into Tears," Earthrights International (ERI), Blocking Freedom, Arakan Oil Watch (AOW), and "Valley of Darkness," Kachin Development Networking Group (KDNG) at www.earthrights.org/burma, www.arakanoilwatch.org, and www.burmariversnetwork.org.
- ⁵ "Asean assails Myanmar crackdown," International Herald Tribune (28 Sep. 2007); "Human Rights Council Strongly Deplores Continued Violent Repression of Peaceful Demonstrations in Myanmar," United Nations Press Release (2 Oct. 2007).
- ⁶ "Myanmar Seizes UN Food for Cyclone Victims and Blocks Foreign Experts," New York Times (10 May 2008); "UN says much of Myanmar cyclone aid is lost," The Guardian (25 Jul 2008).
- ⁷ See http://www.mrtv3.net.mm/open2/010407for.html (Accessed April 13, 2009)
- ⁸ Pa-O Among The Union [Burma], Pa-O Literature Press (2007), in Burmese.
- ⁹ For more information about the Pa-O, see Russ Christensen & Sann Kyaw,
- The Pa-O: Rebels and Refugees, Silkworm Books (2006); Pa-O Among the Union [Burma], Pa-O Literature Press (2007), in Burmese.
- ¹⁰ "Burmese Soldiers Torture Civilians in Shan State," The Irrawaddy (May 22, 2009).
- "Burma Update: Russians eye cast iron plant for Shan State," Mines and Communities (March 6, 2006).
- ¹² See www.myanmar.gov.mm/Perspective/persp/1995/9-95/mya.htm (Accessed October 15, 2008); see also http://shanrelieffoundation.org/modules/tinyd3/index.php?id=4 (Accessed October 15, 2008); "Work continues on gas pipeline," Myanmar Times (October 15-21, 2007); "Burma Update: Russian eye cast iron plant for Shan State," Mines and Communities (March 6, 2006); "Myanmar to extract iron ore on commercial scale," Xinhua (May2, 1997).
- ¹³ "Myanmar to extract iron ore on commercial scale," Xinhua (May 2, 1997).
- ¹⁴ PYO Interview #4.
- ¹⁵ *Id*.
- ¹⁶ PYO Interview #5 and Map of confiscated lands from Regional Command Central Battalion No.3 on file with PYO.
- ¹⁷ "Status of the surface water pollution due to iron ore tailing pond effluent in India," Dr M K
- and P K Sen, Transactions of the Indian Institute of Metals, Volume 53, No 4-5, (August-October 2000).
- ¹⁸ "Burma Update: Russians eye cast iron plant for Shan State," Mines and Communities (March 6, 2006), "Russian business presence becoming stronger in Burma," Mizzima (December 10, 2008).
- ¹⁹ "Russian business presence becoming stronger in Burma," Mizzima (December 10, 2008).
- ²⁰ "Mineral Boiler for Pinpet Mining Factory Project Arrived in Taunggyi," Weekly Eleven News Journal (January 28, 2009).
- ²¹ PYO Interview #1.
- ²² PYO Interview #11.
- ²³ "Work continues on gas pipeline," Myanmar Times (October 15-21, 2007).

- ²⁴ "Thai and Russian companies make new grabs in Burma," Mines and Communities (December 30, 2008).
- ²⁵ "Russian business presence becoming stronger in Burma," Mizzima (December 10, 2008).
- ²⁶ "Russian-Myanmar relations growing stronger," Myanmar Times (February 13-19, 2006).
- ²⁷ PYO Interview #9; PYO Interview #3.
- ²⁸ "Burma Update: Russians eye cast iron plant for Shan State," Mines and Communities (March 6, 2006); "Bureau of Mines Minerals Yearbook Area Reports: International 1978-1979," Kinney, Gordon L. (1979).
- ²⁹ "The cement factory is built in Taunggyi," Snap Shot News Journal (March 7, 2009), translated from original Burmese by PYO.
- 30 Id
- ³¹ *Id.*; "General Than Shwe and Cement Factory," Khit Pyaing News (March 3, 2009), translated from the original Burmese by PYO.
- ³² See www.myanmar.gov.mm/Perspective/persp/1995/9-95/mya.htm (Accessed October 15, 2008) "Analysis of Burma's nuclear program," Dictator Watch (January 2007).
- ³³ PYO estimate using Google Earth software.
- ³⁴PYO Interview #3; PYO Interview #9; PYO Interview #16; PYO Interview #17.
- 35 PYO Interview #3.
- ³⁶ *Id*.
- ³⁷ "Russia says to build nuclear reactor in Myanmar" Reuters (May 15, 2007), Russia to build atomic plant for Burmese junta," The Guardian (May 17, 2007).
- ³⁸ PYO Interview #8.
- 39 PYO Interview #20
- ⁴⁰ "Russian-Myanmar relations growing stronger," Myanmar Times (February 13-19, 2006).
- 41 http://enc.ex.ru/cgi-bin/n1firm.pl?lang=2&f=995
- ⁴² "Russian business presence becoming stronger in Burma," Mizzima (December 10, 2008).
- ⁴³ Andrew Selth. 2002. Burma's Armed Forces: Power Without Glory. Norwalk: EastBridge, p.147, http://www.burmacampaign.org.uk/aboutburma/economy.html#5, http://www.altsean.org/Key%20Issues/KeyIssuesEconomy.htm
- ⁴⁴ "US Treasury imposes new sanctions on Burma firms," Reuters (July 29, 2008)
- 45 See http://www.kyawtha.com
- 46 http://snapshot-news.commodules.php? name=News&file= article&sid= 15643
- ⁴⁷ See http://www.kbzbank.com/aboutkbz.html (Accessed on April 10, 2009)
- ⁴⁸ See http://www.irrawaddy.org/article.php?art_id=2128 ("Above It All" by Maung Maung Oo, February, 2001- Volume 9 No 2) (Accessed on April 13, 2009)
- ⁴⁹ See http://www.kbzbank.com/investments.html (Assessed on April 10, 2009)
- ⁵⁰ "Bureau of Mines Minerals Yearbook Area Reports: International 1978-1979," Kinney, Gordon L. (1979).
- ⁵¹ PYO Interview #5.
- ⁵² PYO Interview #13.
- ⁵³ PYO Interview #1; PYO Interview #2; PYO Interview #3; PYO Interview #5; PYO Interview #6; PYO Interview #7.
- ⁵⁴ PYO Interview #2; PYO Interview #3; PYO Interview #6; PYO Interview #7.
- ⁵⁵ PYO Interview #3.
- ⁵⁶ PYO Interview #6.
- ⁵⁷ PYO Interview #3.
- ⁵⁸ According to factory project plan document obtained by PYO.
- ⁵⁹ PYO Interview #8.
- 60 PYO Interview #13.

- ⁶¹ PYO Interview #18.
- ⁶² PYO Interview #8.
- ⁶³ PYO Interview #5.
- ⁶⁴ PYO Interview #8.
- 65 PYO Interview #23.
- ⁶⁶ PYO Interview #2.
- ⁶⁷ PYO Interview #13.
- ⁶⁸ PYO Interview #12.
- ⁶⁹ *Id*.
- ⁷⁰ PYO Interview #12.
- ⁷¹ PYO Interview #7.
- ⁷² Valley of Darkness, Kachin Development Networking Group (2007).
- ⁷³ PYO Interview #2; PYO Interview #11.
- ⁷⁴ PYO Interview #2.
- ⁷⁵ PYO Interview #9; PYO Interview #10; PYO Interview #11; PYO Interview #12.
- ⁷⁶ PYO Interview #10.
- ⁷⁷ "Iron Ore And Taconite Mine Reclamation And Revegetation Practices On The Mesabi Range In Northeastern Minnesota," David A. Felleson (1999).
- ⁷⁸ "Blood Jade: Burmese Gemstones and the Beijing Games," All Kachin Students and Youth Union and 8-8-08 for Burma (August 2008).
- ⁷⁹ *Id*.
- 80 PYO Interview #8.
- 81 PYO Interview #12.

APPENDIX I

Population around the base of Mount Pinpet

No	Name of villages	House-hold	Population
1	Pinngo (Pang Ngo)	206	629
2	Mai Hai	90	339
3	Su Meng	48	223
4	Ham Kroak	36	172
5	Pone Zin	29	105
6	Phara Ngat Chu	23	165
7	Hti Own Set	17	83
8	Naung Kar Kel	50	255
9	Kon Kyaung	40	217
10	Aung Mur	49	298
11	Leng Ngaok	60	252
12	Naung Kyo	25	192
13	Sayar Kun	55	288
14	Poung Taw Choke	85	450
15	Toon Thi	200	750
16	Nam Gueng	100	450
17	Lone Tan	50	200
18	Tha Tar Tan	70	300
19	Naung Pa Pone	50	200
20	Pa Lae Tint	50	250
21	Naung Kaw	50	230
22	Loi Thang	150	650
23	Htam Tyar	20	94
24	Phar Loung	40	195
25	Ham Nyar	9	43
	Total	1602	7030

APPENDIX 2 List of the families who were forced to relocate

No	Name	Age	Family	Villages	Date of
			Members		Relocation
1	Mu Mue Ngae	50	5	Naung Kar Kel	January 2006
2	Phra Low	60	3	Naung Kar Kel	January 2006
3	Win Maung	35	3	Naung Kar Kel	January 2006
4	Tha Hla	35	3	Naung Kar Kel	January 2006
5	Tha Oo	40	5	Naung Kar Kel	January 2006
6	Tha Koo	45	2	Naung Kar Kel	January 2006
7	Tha Chang	45	3	Naung Kar Kel	January 2006
8	Nang Joung	40	5	Naung Kar Kel	January 2006
9	Tha Bgae	40	2	Naung Kar Kel	January 2006
10	Mu Pha Ti	40	3	Gum Kaw	January 2006
11	Poe Khaing	35	3	Gum Kaw	January 2006
12	Look Mur Yoon	35	3	Gum Kaw	January 2006
13	Chara Othara	60	4	Gum Kaw	January 2006
14	Tha Lwa	40	4	Gum Kaw	January 2006
15	Hla Maung	46	4	Pone Zin	March 2008
16	Aung Nu	48	3	Pone Zin	March 2008
16	families		55 People	Three villages	

APPENDIX 3 List of confiscated lands

From	Number of	Date seized	Confiscated by
Villages/City	Landowners		, and the second se
Pinngo (Pang Ngo)	9	2004 / 2008	Pinpet iron factory
Mai Hai	12	2004	Pinpet iron factory
Pone Zin	11	2004 / 2008	Pinpet iron factory
Naung Ker Kel	11	2004 / 2006/ 2008	Pinpet iron factory
Poung Taw Choke	50	2007 / 2008	Pinpet cement factory
Naung Kyo	7	2008	Pinpet cement factory
Hti Own Zet	17	2004	Pinpet iron factory
Taunggyi	1	2008	Pinpet iron factory
Mai Toung	40	1993 / 2004	212 Communication
			Battalion based in
			Taunggyi
Su Meng	1	2004	Pinpet iron factory
Nyo Rang	4	2008	Pinpet cement factory
Lai Ngaok	1	2008	Pinpet cement factory
Total number of			
landowners	164		

