

# **BLOCKING FREEDOM:**

**A Case Study of China's Oil and Gas Investment in Burma**



**ARAKAN OIL WATCH October 2008**

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## **ARAKAN OIL WATCH**

Arakan Oil Watch (AOW), founded in 2006, is an independent non-governmental organization that aims to protect human rights and the environment from extractive industries in Arakan and Burma. AOW educates affected peoples on these issues, develops and promotes oil and gas revenue transparency standards, and conducts international advocacy. AOW is an active core member of the Shwe Gas Movement and a member of South East Asia Oil Watch. Each month AOW publishes *The Shwe Gas Bulletin* in English and Burmese languages, a newsletter covering the latest developments in Burma's oil and natural gas industry.

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All photos are from Arakan Oil Watch unless otherwise noted

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# INTRODUCTION

Arakan, Burma's westernmost state, began to make headlines after 2003 when one of Asia's largest natural gas reserve – the Shwe gas – was found off the coast and a scramble between South Korean, Indian and Chinese interests for the resources followed. Recognizing the massive changes that such resources could bring to Arakan, a group of concerned residents started an independent “watchdog” group called Arakan Oil Watch (AOW) in 2006. Since then the group has published a monthly bulletin in both English and Burmese languages to monitor movements in Arakan and raise the alert about developments there.

This report is the first from Arakan Oil Watch and is based largely on field research carried out under risky conditions by AOW members from 2006 to mid 2008. It documents what happened when Chinese oil companies explored for oil on Ramree, Burma's largest island, giving a sense of what can be expected as further exploration and infrastructure construction continue in Arakan. Chinese plans for onshore and offshore oil and natural gas exploration and production, the development of a deep seaport, and the construction of pipelines in the “Block M” area of Arakan are already underway.

Chinese companies are the fastest growing investors in Burma's oil and gas sector and China was the biggest foreign investor in Burma's power sector in 2006-2007. The investment provides Burma's ruling military junta with hard cash and the political support of a key international power. Contrary to claims by China's largest oil firms, this investment does not foster a “win-win” situation. Instead, oil and gas exploration results in a series of negative consequences for affected people, consequences that continue to fuel instability and conflict in Burma.

In terms of foreign direct investment (FDI) and the value of exports, oil and gas is the single most significant sector in Burma, accounting

for 90% of all FDI and 45% of exports by value in 2007. According to Thai central bank data, the value of Burma's export of natural gas will increase from US\$ 2.7 billion in 2007 to reach at least US\$3.5 billion this year. These revenues are based on the export of gas from Yadana and Yetagun projects in eastern Burma, while three new blocks, including the Shwe Gas Project, will export twice the amount of gas in the coming years. The Shwe Gas Project is projected to give up to US\$ 24 billion to the regime over 20 years.

Revenues from the oil and gas sector have no independent oversight and are recorded in Burma's public accounts in kyat (the national currency) at the official exchange rate, which over-values the currency by up to 200 times. Therefore the majority of the earnings are not traceable and it is impossible to know how they are spent. However, it is clear that revenues are feeding already high military expenditure and corruption, rather than reinvestment in economic development for the people. This is one reason that Transparency International ranked Burma the second most corrupt government in the world in 2008.

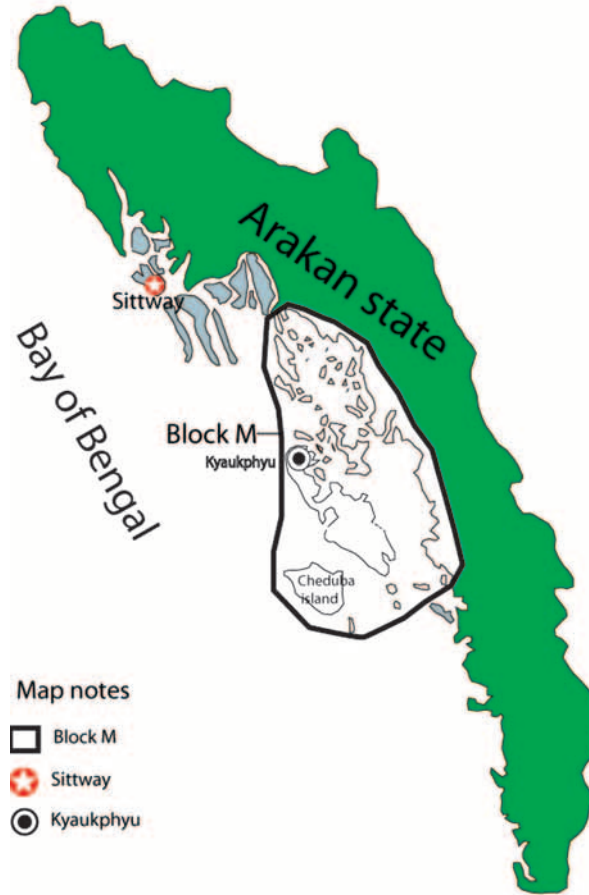
Economic support of an unaccountable regime also translates into political support from neighbors jockeying for Burma's resources. In January 2007 China vetoed a draft UN Security Council Resolution calling on Burma to cease military attacks against civilians in ethnic minority regions and begin a political dialogue. Three days after the veto, the China National Petroleum Corporation of China (CNPC) signed production-sharing contracts for oil and gas exploration.

Only last year, hundreds of thousands of people took to the streets of Burma to protest the sharp increase in fuel prices. We believe export of oil and gas from Burma at a time when most people in Burma lack energy for electricity or cooking will only further escalate conflicts between the people, the regime and foreign corporations.

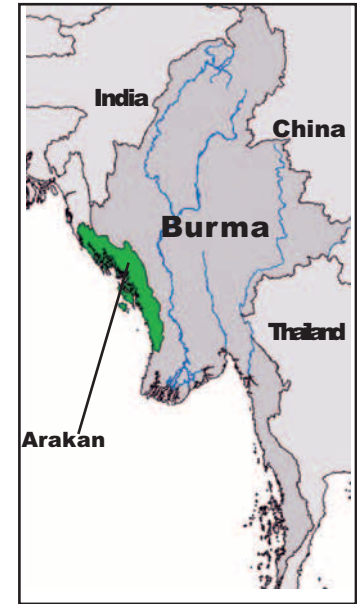


## MAP: Arakan and Block M exploration area

Arakan, also known as Rakhine, is situated on the western coast which is nearly 500 km long. It is bordered by Chin State in the north, Magway Division, Bago Division and Irrawaddy Division in the east, the Bay of Bengal to the west and Chittagon Division of Bangladesh to the northwest. It lies at the foot of the Arakan Yoma mountain range, which separates Arakan State from Burma proper. The capital of Arakan is Sittway. Arakan was an independent kingdom for centuries until 1784 before when it was annexed by the Burman empire.



- Map notes
- Block M
  - Sittway
  - Kyaukphyu



## KEY POINTS: A Brief Summary

- Oil exploration by Chinese companies in Arakan, western Burma, precipitated a rare explosion of local anger in April 2007, resulting in damage to a Chinese drilling site, a crackdown by Burmese forces, and seventy villagers fleeing their homes.
- Burma's oil and gas resources are being exported while a majority of the people has no electricity. Exploration operations carried out without prior knowledge or consent of local residents and without impact assessments resulted in social and environmental abuses contrary to the claims of corporate social responsibility reports by the Chinese companies involved.
- Chinese investment in Burma's oil and gas sector is growing, with 16 blocks under contract for exploration. This investment also includes the purchase of huge offshore natural gas reserves, construction of cross-country pipelines, and the development of a deep sea port, which stand to amplify abuses across the country.
- While the military regime now takes in US\$2.7 billion a year from the sale of natural gas, less than half of the earnings are publicly recorded. Revenue from the sale of new natural gas finds are destined to triple in the coming years. This includes the sale of gas from the Shwe gas project, which would generate an estimated US\$24 billion over the next twenty years.
- Without rule of law, accountability or transparency mechanisms in Burma, Chinese and other companies operating in the country will become complicit in military abuses and conflict.
- Without assurance of adherence to basic international standards, Chinese and multinational oil and gas corporations in Burma need to stop investment and operations in Burma's oil and gas sector until such time as Burma has a genuine democratically-elected government, rule of law, and legislation guaranteeing the protection of human rights and the environment. At the same time, shareholders, investors, and banks that support Chinese and other multinational oil and gas companies must divest their funds from projects in Burma.



**Life on Ramree Island:** Boats fueled by locally produced oil are critical to trade and transport; local oil wells in “Oil Mountain Village” provide 90 percent of the households there with an income. Rice production and fishing are also important livelihoods



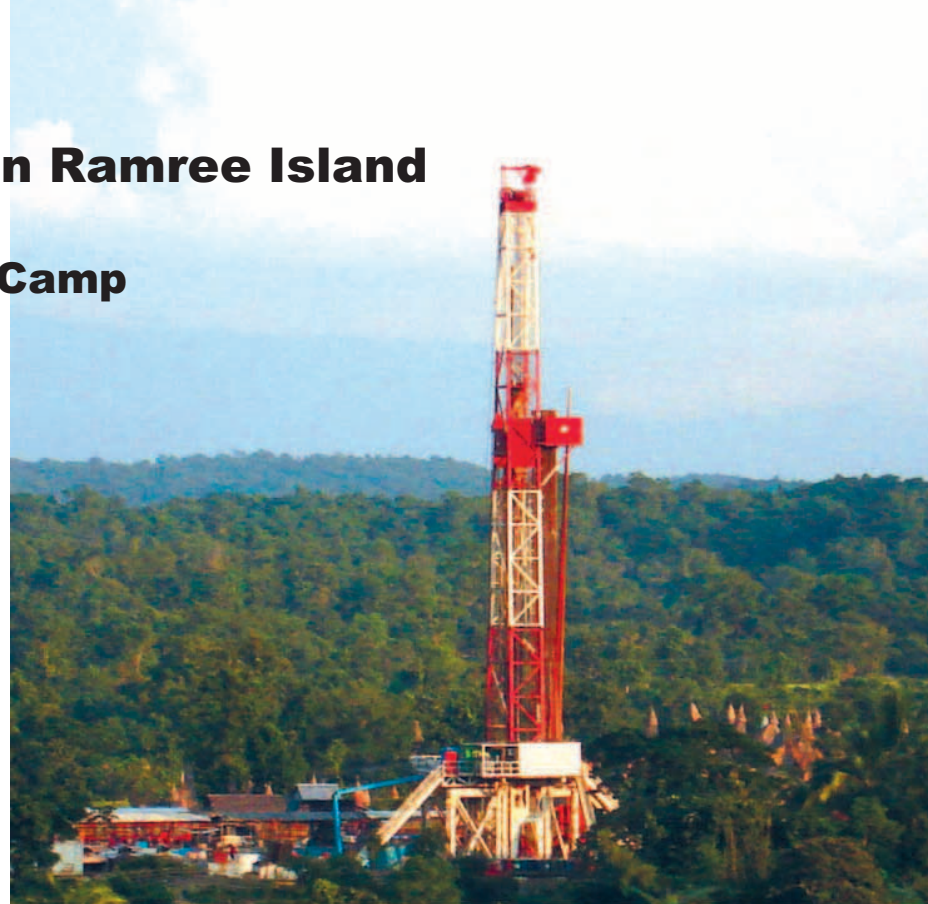
# THE CASE: Anger Explodes on Ramree Island

## Residents Break into the Drilling Camp

In late April 2007 frustrated residents of an island village in Arakan broke into and ransacked the drilling site of the China National Offshore Oil Company (CNOOC). They destroyed and looted drilling equipment and supplies. Soon after the incident the army cracked down on the village, arresting all the men, interrogating them, and jailing shop owners who had purchased the stolen goods. Seventy people have since fled, some as far as Malaysia and Thailand.

After two and a half years of Chinese oil exploration operations on their island, the villagers had had enough. They had endured the seizure or destruction of farmlands and traditional oil wells with little or no compensation, pollution of their local creeks, and underground seismic explosions. Their centuries-old oil-drilling livelihood was under siege. Three army infantry battalions, a navy base, and local police were stationed on the island. Yet the villagers' anger had reached boiling point, and it was unleashed on the drilling site.

The following pages describe the Chinese oil explorations on Ramree Island and tell the story of what happened leading up to the April break-in. Although the exploratory stage has now been completed, local people have not been informed about the next stage of operations.



***“They came and searched house by house, shouting and kicking over our rice cookers.\* They took the men for questioning and beat us.”***

(A Renandaung villager)

*\*Rice cookers are the most important item in an Arakan household*

# A WAY OF LIFE: Drilling Oil for Local Consumption

***“We grow just enough rice to feed our family, and my husband’s job as an oil driller is our only income.” (mother of 3)***

Traditional oil drilling has, for centuries, been a way of life on Ramree Island, where local villagers use hand-dug wells to capture natural seepages. In the past, when the rice crop was harvested in December or January, villagers with spare time took to oil drilling as a means of adding to their meager farming incomes. The oil season lasted until the rains returned in June, marking the start of the farming year.

With the country’s economy failing, inflation rising, and poverty increasing, oil drilling has shifted from a seasonal activity to a year-round job and main income source even for farmers. The wells also finance local social development and are often used to support the running of temples and monasteries. Today, there are over 5,000 hand-dug wells on the island.

Many villagers use the Canadian rod drilling system which an Arakan oil driller learnt from the Boronga Oil Company in the 1800s. A tripod of tree trunks or bamboo about 40 to 50 feet high is constructed over the well. The

tripod supports a pulley to which a drilling tool is attached.

This method requires the worker(s) to spend several hours vigorously pounding in order to reach and then extract oil. Wells can be as deep as 500 feet and are usually four square feet. Usually, there are five to seven people working one oil well; often this process involves an entire family. Those wells with a mechanized drill require only 2-3 workers, but these are too expensive for most.



Oil drillers on Ramree usually sell crude oil drilled from their wells to locally-owned refineries on the island. The refineries produce petrol, diesel, and dregs for local consumption.

Almost everyone on the island depends on locally produced oil and its byproducts to fuel fishing boats, vehicles, and motorbikes as well as to run local generators which supply electricity to households and businesses. Government-provided supplies of oil are limited to official and military use only. Locally produced crude oil and dregs are also used for preserving wooden and bamboo structures, caulking boats (the main means of transport in Arakan), illuminating rudimentary lamps made from half a coconut shell, lubricating cart wheels, and waterproofing paper used for umbrellas, as well as for occasional medicinal purposes.

# THE CHINESE ARRIVE: A Deal to Explore for Oil

Block M is an area covering 3,007 square miles that begin onland in western Burma's Arakan State and include several islands off its coast, including Ramree (see map). Ramree is the largest island in Burma and is strategically located; sea routes from Ramree lead to India, the Middle East, Africa, and beyond. The total estimated population of the Block M area is 600,000.

On October 22, 2004, at the Trader's Hotel in Rangoon, a consortium of one Singaporean and two Chinese companies signed a production sharing contract with the Myanmar Oil and Gas Enterprise (MOGE), a 100% junta-owned oil and gas company, to explore the onshore area of Block M. China National Offshore Oil Company Ltd., of parent company China National Offshore Oil Corporation (CNOOC) (China's third-largest oil and gas corporation), was designated managing partner of the consortium, responsible for coordinating oil and gas exploration and development in Block M. CNOOC Ltd. made international headlines in 2005 when it made unsuccessful bid to take over US oil giant Unocal.

The deal represented yet another victory for Burma's military regime, increasing its revenue and strengthening its ties to foreign governments. In contrast, the agreement, and the arrival shortly thereafter of the CNOOC consortium in the Arakan region, has had only negative consequences for the Arakanese people living in the exploration area.

## Other operators

In addition to CNOOC, the following companies have been involved in Block M operations. *For full company details see appendix.*

**China Huanqiu Contracting & Engineering Corporation (HQCEC)**, a subsidiary of China's largest oil company, China National Petroleum Corporation (CNPC).

**Golden Aaron Pte Ltd**, a US-sanctioned Singaporean company owned by the family of Burmese drug lord Lo Hsing Han.

**Asia World Company** and **Asia Guiding Star** of Burma were contracted to provide logistical support such as transportation, road construction and labor.

**Sichuan Geophysical Company** and **China Oilfield Services Ltd (COSL)** conducted seismic surveys and test drillings of the site.

SCGC





Photo: tab

*Seismic survey by CNPC workers on Ramree Island*



Source: CNOOC CSR Report 2005

*CNOOC worker with local people*



*The abandoned drilling site in Laydaung*



*Drilling hole in Laydaung where oil continues to percolate*



## **OPERATIONS BEGIN: Seismic Explosions Shake the Island**

***“The explosions were so frightening.”***  
**(A Villager)**

Soon after the agreement was signed, consortium partners began to conduct seismic surveys of Ramree Island. Double the size of Singapore (1,350 sq km), the island is home to an estimated 400,000 people. Although Ramree villagers survive on a mixture of subsistence farming, fishing, and oil drilling, the oil business is integral to every aspect of the island’s economy. *See Box: A Way of Life.*

Seismic surveying involves using explosives or a vibroseis truck to send sound waves into the ground. Instruments record the reflections of these waves to construct a picture of the underground landscape.

The Sichuan Petroleum Geophysical Company (SCGC), a part of China National Petroleum Corporation, the largest producer and supplier of crude oil in China, set up a base camp outside the city of Kyauk Phyu on Ramree Island. Three thousand workers were employed through Asia Guiding Star, a Burmese service company. Out of those 3,000, however, only three workers were from Arakan; the rest were shipped in from Rangoon.

The workers fanned out across the island during the six-month period from October 2004 to March 2005, conducting an estimated 10,000 tests. According to one worker *“The tests began five miles away from the city of Kyauk Phyu and continued throughout the entire island.”*

***“The mining sounds [from seismic surveying] could be heard 2 to 3 miles away. The houses shook from the explosions. They did this close to the village, sometimes just 20-30 feet from the villager’s houses. Some rice farms and plantations were also destroyed.”***

(Worker on seismic surveys)

The surveying, or test mining as some call it, was conducted without permission from land owners. Yet farms were left with large holes in the fields, crops were destroyed by trucks running over them, farmed trees were uprooted, and fields were left infertile. No compensation has been offered for damage done to lands or crops.

***“Usually after I finish rice farming, I drill oil. The rice farming this year was not as good as it had been in previous years. The Chinese mined some of the fields as part of its oil explorations. As a result, rice farms were destroyed and they left us with big holes on our land. No one gave us any compensation for the damage.”*** (A farmer and oil driller)



*An overview of the drilling rig at Renandaung*



*Inside CNOOC's camp*



*Drilling rig next to a pond of a Buddhist monastery*



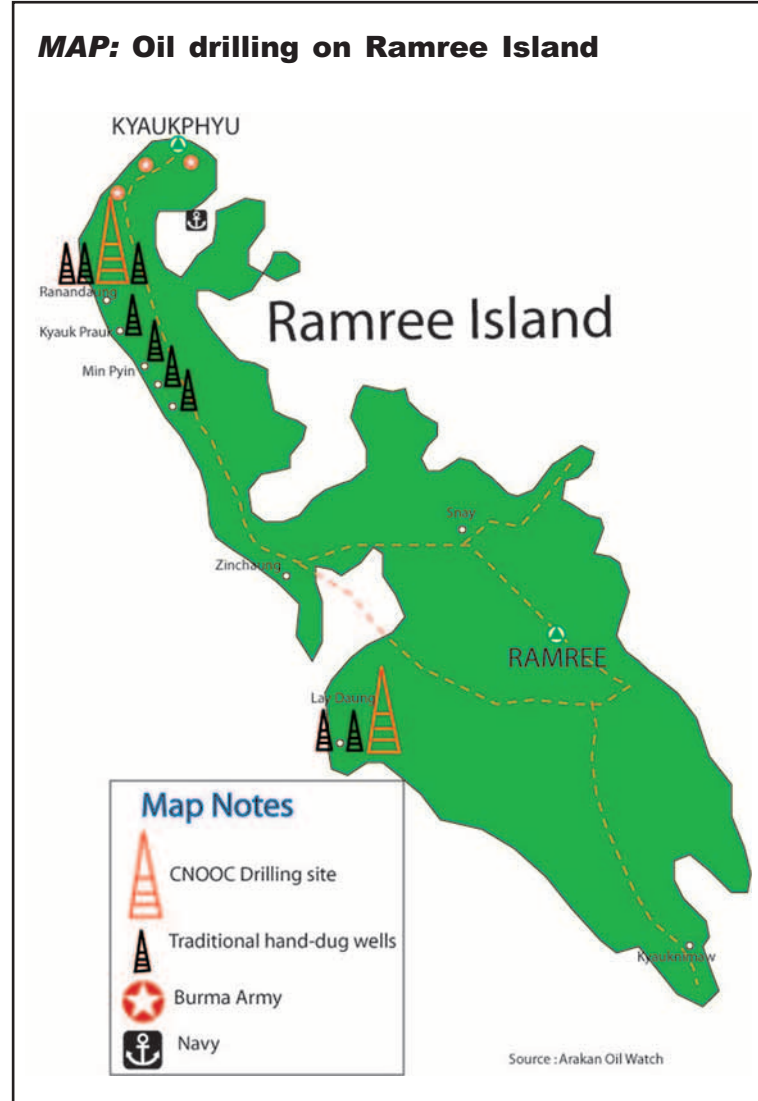
*Inside CNOOC's camp*

# Giant Drilling Rigs Spring Up

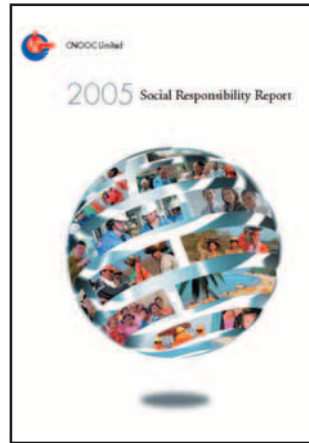
Upon completion of the seismic surveys, CNOOC set up an exploratory drilling site with 100 Chinese workers in Laydaung district on the central western edge of the island. However, when the drillers reached a layer of rock that could not be penetrated, they closed up this site in late 2005. The well was not cemented, and oil can still be heard percolating up from the ground. A guard who was paid to look after the site told local residents that the Chinese are intending to come back.

After experiencing difficulties in Laydaung, CNOOC moved its workers and equipment to Renandaung village, 50 kilometers to the north. They set up a camp for 100 Chinese workers and started drilling in late 2006. An oil rig 1,000 feet high dwarfed the traditional tripods dotting the landscape nearby and was able to reach depths of 10,000 feet (see photos). The drilling site covered a two square mile area.

**MAP: Oil drilling on Ramree Island**



## IN THEIR OWN WORDS: The Companies Speak



***“In addition to paying respect to local religions, cultures and customs, the Company also affords support to local community development...”***

- CNOOC Corporate Social Responsibility Report (2005)

***“We respect the customs of the local people and have built an excellent relationship with the local people.”*** - CNPC Corporate Social Responsibility Report (2007)

***“With a complete environmental protection management structure, the Company has assigned professional management staff in the area of environmental impact assessment, pollutant recovery, environmental protection control, etc.”***

- CNOOC Corporate Social Responsibility Report (2005)

***“...companies recognise the importance of developing positive relationships with the communities in which they operate and with other stakeholders, to help mitigate risk and deliver net benefit for all parties.”*** - International Petroleum Industry Environmental Conservation

Association, of which CNOOC is a member (2008)



# IMPACTS: Disrespect and Rights Abuses Fuel Local Anger

The establishment of the drilling sites and influx of workers and trucks on Ramree Island stoked local anger. In contrast with CNOOC and CNPC claims of “respecting local customs,” muddy streets, bad smells, loud sounds, and bright lights all disturbed villagers.

Company trucks crossed through the village to reach the drilling site from the main road. *“The company trucks drive just in front of our house and the mud from the roads splashes into our main room. The loud sound is a huge nuisance for us as they drive ceaselessly, even at night time without any respect for the villagers.” (A Renandaung villager)*

According to Arakanese custom, placing a restroom in front of a building is considered unsanitary and extraordinary bad luck. Consequently, toilets are almost never built in the front of an Arakanese house or compound. However, when the

CNOOC workers set up their camp, they ignored this custom.

***“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. To make matters worse, they built a toilet in front of our tent. That is very bad luck for our livelihoods.”***

(A female farmer)

***“Sometimes the Chinese workers drill for 24 hours straight. Sometimes its three days long non-stop. The sound is unbearable and the lights from the site are so bright we can’t sleep.”*** (A Renandaung villager)

*CNOOC’s worker camp in Renandaung*





## RENANDAUNG: “Oil Mountain Village”

Renandaung means “Oil Mountain” in the Arakanese language—and for good reason. Traditionally an area with an abundance of oil, the village has managed to sustain a decent local economy based on the commodity. Some ninety percent of the village’s 200 households consider oil their primary source of income. Many other inhabitants, meanwhile, come from elsewhere on Ramree Island in search of work on one of the 2,000 hand-dug oil wells there.

The search for oil is unrelenting for Renandaung villagers. One native said, “*some villagers even drill oil inside the house compound.*” Each day, local oil drillers can collect between one and four gallons of oil, depending on the well’s productivity. Wells can produce for several years.

Drillers can drill anywhere they please in the village by paying 1/7 of their profits to the land owner. Wells average four square feet and are spaced approximately five feet apart. Crude oil can be sold to any of the ten local refineries in the village for 4,000 kyat (about US\$4) per gallon.

Ordinarily, the cost of drilling for oil is divided amongst five to seven households, as the typical resident cannot afford drilling equipment that costs upward of 500,000 kyat (US\$390). Some villagers hold shares in neighbors’ wells and work as farmers simultaneously.

Farmers that cannot afford to become shareholders in drilling projects instead work as drilling laborers after the seven-month farming season has ended in December or January. Daily workers not only from Renandaung but also from several nearby villages can earn 1,000 kyat (women) and 1,500 kyat (men) per day.

Despite the abundance of drillers in the region, oil isn’t easy to come by. Although some lucky drillers are able to find oil within a few weeks at depths of 50-100 feet, it typically takes two-to-three months drilling up to 500 feet before oil is discovered. Some can gain money quickly by discovering oil and selling it for commercial use, while others continue for quite some time before striking oil.

## **IMPACTS: Local Oil Drilling Threatened**

An estimated 300 local hand-dug oil wells were seized by local police, headmen, and other authorities working on behalf of CNOOC during their exploration operations. Several refineries in the area of Renandaung were also forcibly shut down. A refiner who was forced to shut down in 2006 explained:

*“My refinery and two others have been shut down by local police at the request of CNOOC. They provided me with no compensation and no place to rebuild it. I had to stop work for a month in order to rebuild a new refinery farther away from CNOOC’s drilling site. I did not sue them because I didn’t think it would work, since they had the backing of the local police.”*

Another refinery owner added:

*“The government does not distribute enough oil to Kyauk Phyu Township to support us. The people depend on our local refineries. If the Chinese explorations are successful and our local refineries are shut down, we won’t be able to fuel our motorboats, cars, motorbikes, and hand tractors. Many will face difficulties.”*



*Traditional oil drilling*

In addition to the immediate impact of losing their drilling sites, local drillers may also face long-term consequences from CNOOC’s operations. CNOOC’s exploratory well reached the depth of 10,000 feet, or twenty times deeper than the maximum 500 feet reached by traditional methods. This poses long-term risks, including losing the ability to access oil by traditional methods. According to a former MOGE geological engineer:

*“Oil drilling with modern and heavy machinery can change the geological structure in which oil currently accessible to traditional drillers would drain away into deeper layers.”*

The engineer cited the example of drilling conducted on Man Aung Island by MOGE during 1980 and 1981. The Heinzane oil field had a similar structure to the fields in Laydaung and Renandaung and wells there were also dug up to 500 feet by traditional methods. During MOGE’s operations, test wells were dug amid the old field and the MOGE drilling rig dug to about 2,000 feet. After one year the drilling team retreated. According to MOGE’s engineer: “Since then, the wells have produced nothing. It must be due to infiltration of drilling mud into the upper layers where oil was accessible.”



## **Story 1: Traditional Oil Driller Loses His Livelihood**

**A father of three children and traditional oil driller lost his oil fields and land to CNOOC in 2006. Oil drilling was the single main business for his family and they are now struggling to make ends meet. This is his story.**

“The Chinese came and bull-dozed all of my land, leaving it covered in sand. The land was owned by my ancestors and had been in my family for many generations. The land is registered under my name in the local government office. But that didn’t matter to the Chinese.

There were eight producing wells on my land. I asked them to leave me with at least one oil well because my family’s long-term survival depends completely on the revenue from the wells. For a while, they didn’t reach the area around that well, so I figured they had held up to their end of the agreement.

Then one day, I went to my oil field to build a tent on the remaining well. When the Chinese oil workers arrived and saw me holding a knife, they went to tell the security guards that I tried to kill them. Upon hearing this, a guard named Nyan Tun came and confronted me. I explained to him that I had not intended to kill the oil workers, and that when I saw them digging soil near my last remaining oil well, I had just come over to tell them that if my oil well would be destroyed I wouldn’t have anything left to survive on.

In the end, they took the remaining well and left me just a





small area of farm land.

I hired a farmer to grow rice on the remaining farm land, but he said that nothing could grow there anymore. I also tried to drill oil on the remaining land, but the smell from the Chinese workers' toilets nearby is so bad that my workers have refused to drill on it. Now I am drilling as a partner on someone else's land. This is my only job and our family situation is getting worse. I have three children. Two are students, but my oldest son had to withdraw from school in 9th grade because I could not support him to continue.

Originally, a translator speaking on behalf of the company told me that they would give us compensation. And one time, a man from the Land Department office told me that the compensation money for my land had arrived in his office. But he refused to tell me when they would give me the money, although I was quite persistent. Until today I've never received any compensation. I think that the township and district authorities are keeping the money for themselves. *Note: CNOOC compensates 40,000 kyat (US\$31) for land seizure, regardless of the size of the land taken. The money is given to Burmese officials, and doesn't always reach the owner of the land.*

I have lost land, and so have many other people. Chinese oil workers are now living on the land of one of my friends. He may be able to use it after they leave, but not my land—they have poured concrete on it and laid three stone floors. It's useless to me now.

Local authorities have ordered all of us not to enter

CNOOC's drilling site. Once when I was drunk I ignored the order and decided to enter because the Chinese were on my property. I told one of the guards that if he wanted to arrest me he could and I climbed the drilling rig in protest. Nothing happened to me but nothing changed either. That was the last time that I entered the drilling site.

I'm not sure what will happen in the future. But I know that if they do find oil and they order us to move, we won't be able to complain or refuse. If we complain, we will be arrested. Even now, we cannot complain or we will be arrested.

The Chinese operations are horrible and provide no benefit for us. As a result of these oil explorations, we have all lost our wells. I have personally lost both oil wells and rice farms. How can it be a good thing for them to be doing this when they provide us with no compensation?"



*September 2008: The gate of the CNOOC drilling camp guarded by local police. The sign board reads 'Restricted Area, Entry Prohibited.'*

***“During CNOOC’s explorations, our chili crops were damaged by workers who drove cars across our fields. One of the neighbors lost everything. We were offered no compensation. Our paddy harvest was also not very good this year, and we can’t figure out why. Life is getting more difficult.” (A farmer)***

## **IMPACTS: Farmlands Seized, Crops Damaged**

Over 200 acres of farmlands were confiscated for CNOOC’s exploration operations. According to a source close to the local land department office, *“The Chinese paid 40,000 kyat (US\$31) for each farmer who lost land,*

*regardless of the size of the farm. However, the township chairman takes 10,000 kyat for himself.”* Interviews with farmers corroborate this.



*Land that was confiscated for CNOOC’s drilling site in Laydaung*



## **Story 2: Son Returns Home to Find Farm Seized, Parents Devastated**

**In November 2006 a goldsmith from Rangoon returned to his village after receiving a message from his parents that their house and land had been seized. This is his story.**

“Our land is registered under the name of my father. CNOOC seized four acres and gave us just 30,000 kyat (US\$24). We can earn 30,000 kyat by selling the wood of a single tree. We never really cared about the cost of the land, since we had no intention to sell it and had put so much effort into maintaining the trees. However, if we had decided to sell, we could have gotten 400,000 kyat (US\$313).

We had so many good, carefully grown trees on that land. We had about 60 teak trees that could have sold for 4-500,000 kyat (about US\$400). Teak has a current per-unit price that is more expensive than gold. All of our trees were fit for use in building a home, and yet these trees were dug up with bulldozers and are now gone. My father wept when he saw CNOOC uprooting our trees and clearing our land.

We had to accept it; complaining about it is simply not an option. My father and mother are old and cannot work hard. They’ve been given no choice but to accept this entire ordeal and everything that CNOOC has done to them. Even though



(we own the land) the land is registered in our name we have to do what they order us to do.

Several other people lost their land around here but among them we lost the most. CNOOC has been drilling mainly on our land. The Chinese paid a local man 30,000 kyat every three months to guard the land, while the rest of us got 30,000 kyat for all of our land. It is bitterly ironic.”

**“My husband and I lived on a farm where CNOOC is currently drilling for oil. There are a lot of teak and other trees on the land. One day during the monsoon season, a CNOOC bull-dozing crew came to our farm and told us that we needed to move from our home. I asked them to allow us one week to move all of our belongings, but they refused. We had to get out quickly, in the middle of the rain.” (The goldsmith’s mother)**

## **IMPACTS: Toxic Wastes Discharged into Local Waters**

To dispose of the waste from CNOOC's oil drilling site in Renandaung, CNOOC workers dug shallow canals designed to carry the "drilling muds," or wastewater containing oil, away from the drilling sites and into Chaing Wa Creek, which curves past several local farms before flowing into the Bay of Bengal. This is a direct breach of claims by CNOOC of proper environmental protection procedures.

Drilling muds used in oil exploration to lubricate the drill bit and pull cuttings away from the well head may contain volatile organic compounds, polycyclic aromatic hydrocarbons, arsenic, barium, lead, corrosive irons and other hazardous substances. This arbitrary disposal can make soil in surrounding areas unsuitable for plant growth by reducing the availability of nutrients or by increasing toxic contents in the soil.<sup>1</sup>

<sup>1</sup> *Human lives for natural resources*, Southeast Asian Information Network, 1994.

***"Since CNOOC began drilling, I often find dead fish in the river. In the beginning, we ate the fish. But no one dares to eat them anymore, after people began getting headaches and getting sick. The headaches lasted about two or three days. These days we also get itchy after going in the creek. We have to take a shower immediately after we go in the water. It was never like this before. Nobody warned us not to go in the creek, and no one has helped us with our sickness."* (Farmer and oil driller)**



*The Chiang Wa Creek, where CNOOC dumped toxic drilling muds*





***“They dug a shallow canal through my rice farm without letting us know anything. They did not give us any compensation and they didn’t tell us anything about the wastewater. I haven’t made a complaint to the authorities because I see that other people can’t even complain when their lands are seized.”***  
**( A mother of three)**



***“Direct discharge of oil-based mud and oil contained cuttings into the sea are strictly forbidden.”*** - CNOOC Corporate Social Responsibility Report (2005)



## UNCERTAIN FUTURE

Exploratory drilling was conducted until April 2007 in Renandaung. At that time, the well was cemented and the drilling crew left. According to workers from inside the camp, the rig drilled to a depth of 10,000 feet, four cement blocks were installed every 2,500 feet, and a production crew will return to open the well and begin production.

The drilling camp remains guarded by local police and local residents have been told that a production crew will be coming back. Villagers say that if the Chinese decide to begin producing oil in their village, they will have to relocate and will have no chance to continue tending their own wells. There is a rumor in the village that if production begins, the villages within a five miles radius of the drilling site will be removed.

It was shortly after the Chinese drilling crew left that villagers broke into the CNOOC site.

***“I want CNOOC to leave for good. When they arrived, our land was confiscated and now everything is more expensive to buy. I think that if their project is successful, the entire village will have to be relocated.”***  
**(Farmer and oil driller)**

***“If the Chinese find oil here and decide to drill, I’ll have to pack up and leave. We have no choice.”*** (Local oil driller)

***“We believe that community and social acceptance is the important foundation for our long-term development. Since establishment, the Company has been committed to building reciprocal and mutual-trust friendly relations with stakeholders.”***

**CNOOC Corporate Social Responsibility  
Report (2005)**

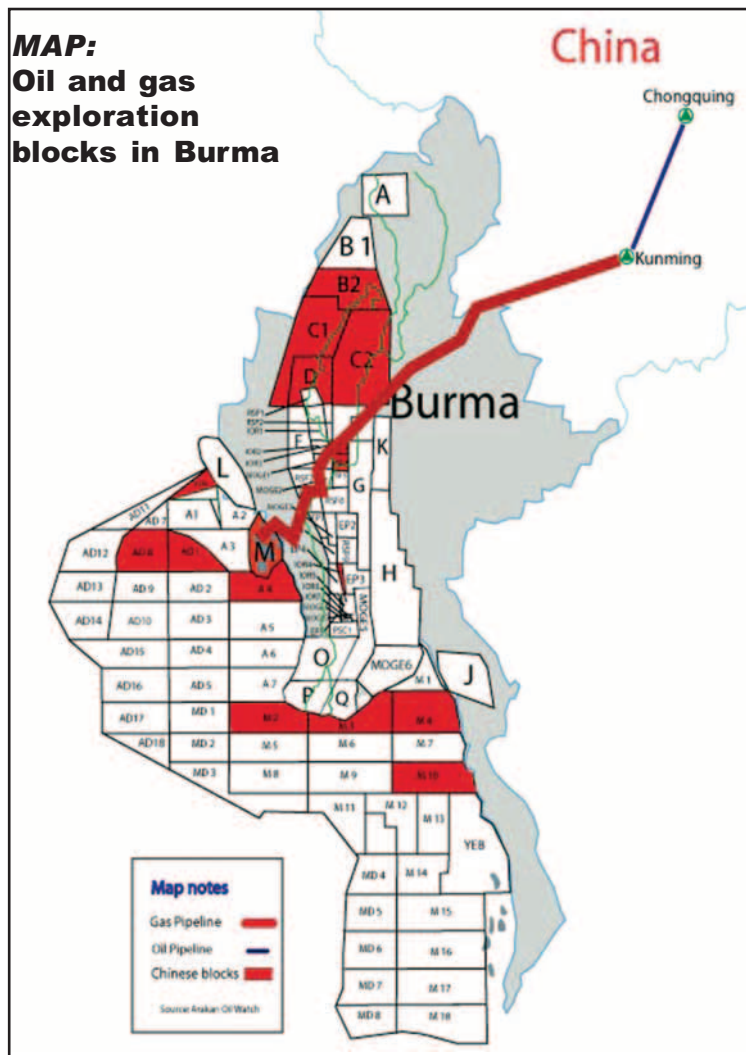
# HIGH STAKES: China's Investment in Burma's Oil and Gas Sector

Although Chinese companies are relatively new investors in Burma's oil and gas sector (first arriving in 2001), they now have stakes in 16 oil and gas blocks and China is now the biggest foreign investor in Burma's energy sector (see map). China's three major state-owned companies CNPC, CNOOC and Sinopec, are all involved in the sector.

CNOOC consortium partners signed a Production Sharing Contract (PSC) with MOGE for the exploration of oil and gas in blocks C-1 and C-2 on January 6, 2005<sup>2</sup> (see map). SINOPEC Jiangnan Oilfield Company, a sub-contractor, finished the first phase of seismic prospecting in 2006.<sup>3</sup>

Blocks C1 (17,000 square km) and C2 (10,234 square km) are both located in Sagaing Division. Sagaing, situated in the northwest of the country, is the largest division by land area, with an estimated population of 538,000. Over one million acres are under paddy cultivation and eighty percent of the nation's wheat is grown there.

Oil and gas exploration in Sagaing Division, if carried out as it was in Block M, will be done without informed consent, protection of livelihoods, health, or the environment. Exploration in this area also threatens Burma's main river, the Irrawaddy.



<sup>2</sup> <http://www.myanmar-information.net/infosheet/2005/050127.htm>

<sup>3</sup> <http://www.jhpa.com.cn> Date: 2006-09-16

# WESTERN BURMA: New Gateway to China

*“China’s warming relationship with the Southeast Asian military regime the West loves to hate is emerging as a vital element in solving one of Beijing’s biggest problems — energy security. The jungles of Burma now seem certain to provide a shortcut for oil from the Middle East and Africa to the Chinese border.”<sup>4</sup>*

## China’s growing thirst for oil and gas

As China’s GDP grows an average of 10 percent annually, its quest for oil, gas, and other natural resources around the globe has increased to sustain its soaring economy and to meet its energy consumption. In 2006 alone, Chinese energy companies spent US\$10 billion acquiring overseas upstream assets.<sup>5</sup>

China is the world’s second-largest consumer of oil behind the United States.<sup>6</sup> Annual consumption is increasing by half a million barrels per day – the largest annual consumption increase rate in the world.<sup>7</sup> China is also the third-largest net *importer* of oil and is the world’s fastest-growing importer. Industry estimates predict that oil imports will grow to 200 million tons (per annum) by 2010.<sup>8</sup> According to the Eurasia Group, China is also developing its natural gas sector with imports expected to grow. With insatiable growth and consumption rates, and its dependency on imports, China’s overseas investment in oil and gas continues to accelerate.

## Over-reliance on Straits of Malacca

Currently an estimated 80 percent of China’s imported crude oil – coming mainly from the Middle East and Africa – is transported through the Malacca Straits. The Malacca Straits is approximately 2,000 kilometers shorter than any of the dozen strategic sea routes in the region. China’s dependency on and rapid growth in imports outlined above mean that reliance on this route will also only increase in the future. The independent U.S. Institute for the Analysis of Global Security has projected that oil tankers bound for China from the Mideast and Africa are likely to be carrying more than half of total Chinese energy needs by 2015.<sup>9</sup>

Due to US naval dominance and potential security problems in the Straits of Malacca, China’s dependency on imported oil transported through the Straits is a crucial security concern for fueling its dramatic economic growth. It is therefore vigorously pursuing options to decrease its dependency on the Straits.

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<sup>4</sup> “China seeks Burmese route around the ‘Malacca Dilemma’,” Graham Lees, World Politics Watch February 20, 2007.

<sup>5</sup> Oil Tops China Overseas Shipping List, April 10, 2007.

<sup>6</sup> “China’s energy consumption up 8.4% in 2006,” Xinhua, July 3, 2002, citing *Statistical Review of World Energy*, 2007.

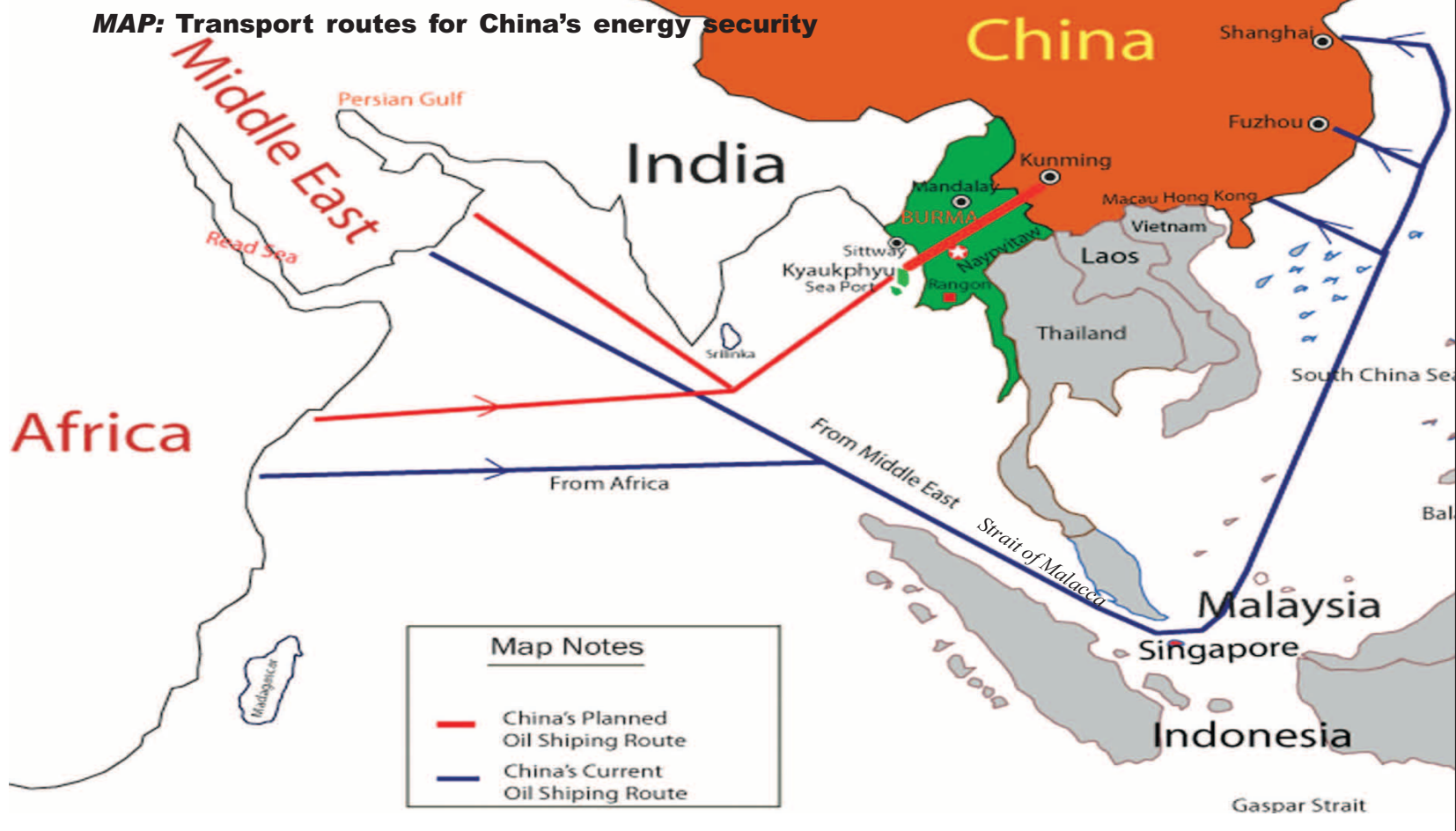
<sup>7</sup> *China’s overseas investments in oil and gas production*, Eurasia Group, October 2006.

<sup>8</sup> *Southeast Asia and Energy: Gateway to Stability*, Zhang Huegang, China Security, Vol 3 No 2 pp. 18 – 35, World Security Institute, 2007.

<sup>9</sup> “China seeks Burmese route around the ‘Malacca Dilemma’,” Graham Lees, World Politics Watch February 20, 2007. China Youth Daily, June 15, 2004.



**MAP: Transport routes for China's energy security**



### Burma: A golden backyard for China

Given China's growing need for oil and gas resources, and its desire for alternative transport routes for its imports, Burma is an attractive neighbor. The development of a deep sea port on the country's western coast would provide a new transit point for oil and gas imports as well as easy access to the Indian Ocean. A pipeline running from the coast to southwestern China would

reduce the Malacca voyage by 1,200 km or roughly seven days of shipping from its African and Middle Eastern crude oil source points as well as provide a conduit for any resources secured in Burma. The seaport and pipeline(s) would help China with its long term energy security, allowing it to diversify its transportation routes and avoid powerful countries that dominate the Malacca Straits and Indian Ocean.

# CHINA'S PLANS IN ARAKAN

Block M and the exploration for oil there was a first step toward implementing larger plans for Arakan, western Burma, which include the following.

## ***Purchase of Natural Gas Offshore***

A June 2008 Memorandum of Understanding confirms the sale of natural gas from blocks A-1 and A-3 off Burma's western coast – the so-called Shwe gas – to China's CNPC. According to the U.S. based oil industry consultant Gaffney, Cline & Associates Ltd., the A-1 and A-3 blocks have an immense 5.4 to 9.1 trillion cubic feet of natural gas equivalent to 2 billion barrels of crude oil. The gas was sold to CNPC even though a higher bid for it was made by the Gas Authority of India, a consortium partner exploring the Shwe blocks.<sup>10</sup>

## ***Development of Deep Seaport***

State-run Chinese media have reported that Burma's Asia World Company has been involved in the early construction stages of a deep sea port the small island of Maday Kyun, just east of Kyauk Phyu, the largest city on Ramree.

Ramree has long been a strategic spot; it was used as a base by the Royal British Army in World War II to defeat the Japanese. Kyauk Phyu has an airfield and an existing port able to service large vessels.

Just five kilometers away, a port at Maday Kyun is comparable to the Kyauk Phyu port, which has a water depth of 20 meters and is capable of accommodating 4,000 TEU container vessels, larger than those in China's busiest port, Shanghai.<sup>11</sup> If the port were to reach this capacity it would be within the top twenty busiest ports in the world in terms of container traffic.<sup>12</sup>

## ***Construction of Oil and Gas Pipelines***

### ***Natural gas pipeline***

The June 2008 MOU also provides for six companies from China, Burma, South Korea and India to build a *natural gas* pipeline from Arakan across the country to Kunming in China.

China is likely to import 219bn-365bn cu ft of gas a year from Burma over the next two decades, according to a report by the Research and Analysis Wing, an Indian government

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<sup>10</sup>“CNPC Inks Natural Gas Cooperation Agreement with Myanmar,” June 25, 2008, Xinhua News Agency. For more background information on the Shwe gas, please see *Supply and Command*, Shwe Gas Movement, 2006.

<sup>11</sup> “Myanmar to build deep-sea port in western state,” Xinhua, June 30, 200. The capacity of container vessels is measured in TEUs (Twenty-foot Equivalent Units), or the number of 20-foot containers a vessel can carry.

<sup>12</sup> <http://aapa.files.cms-plus.com/Statistics/WORLD%20PORT%20RANKINGS%202005.xls>

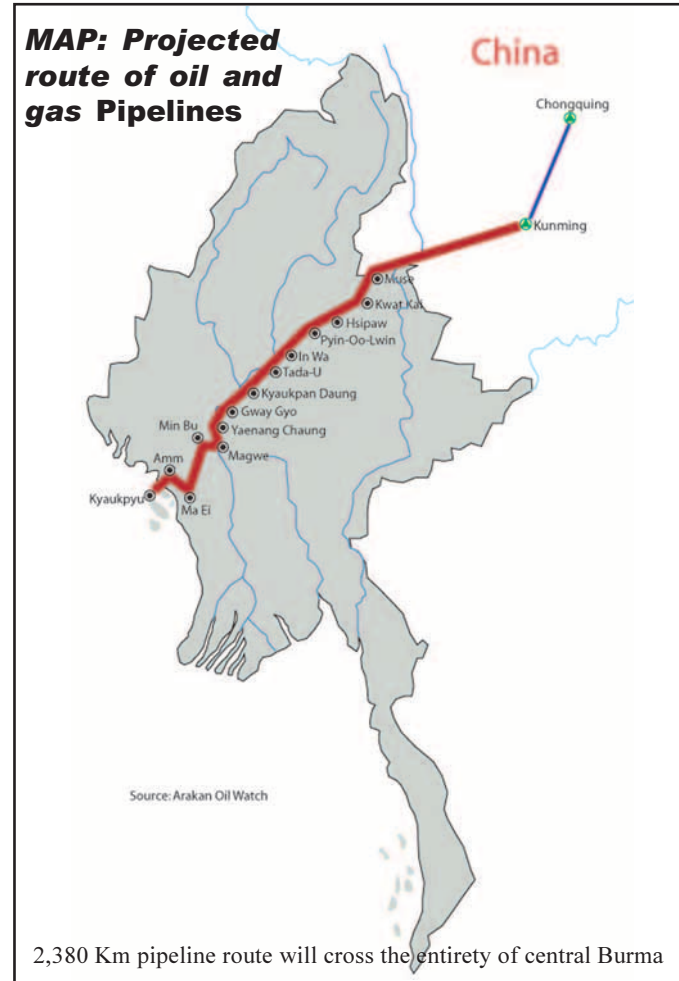
intelligence agency.

China will invest US\$1.04 billion to build the pipeline and pay an annual transit fee of US\$150 million for 20 years for the use of the pipeline in Burma. It is reported that in exchange for the pipeline deal, the Chinese government will provide an additional US\$83 million loan to Burma to develop its oil resources.

### ***Oil pipeline***

China's National Development and Reform Commission approved an Arakan-China *oil* pipeline in April 2007. According to some reports, the pipeline would extend to Chongqing in Sichuan province, where the city is planning to build a 10 million ton capacity refinery to process imported crude within the next three years.<sup>13</sup> In December 2007 state-owned CNPC signed an agreement with the province of Yunnan to build an oil refinery base which would allow the oil to be refined in Kunming.<sup>14</sup> This would allow the pipeline to terminate in Kunming.

These 2,380 km pipelines would cut across the entirety of central Burma and are nearly seven times longer than the controversial Yadana/Yetagun pipeline in eastern Burma. During the construction of that pipeline, at least 16 military battalions were mobilized, tens of villages forcibly relocated, and villagers forced to work for no pay.



<sup>13</sup> “Construction of China-Myanmar oil pipeline expected to start this year,” Xinhua, April 22, 2007, *Myanmar Gas: The Pipeline Psywar*, B. Raman, Institute for Topical Studies, Chennai, Paper No. 2244, May, 2007.

<sup>14</sup> “China’s CNPC, Yunnan ink refining agreement, part of plans for Myanmar pipeline,” Associated Press, December 3, 2007.



# CONCLUSION

Operations in Block M, involving underground explosions, the confiscation of local oil wells and farm lands, the destruction of crops and pollution of waterways, were all conducted without the prior knowledge or consent of local residents. Villagers had no chance to participate in any decisions surrounding the operations and had no course of redress. This total disregard for community rights helped fuel the anger that exploded in April 2007 and resulted in destruction at the exploratory drilling site.

The China Offshore Oil Company (CNOOC Ltd.) is proud to be the only Chinese member of the International Petroleum Industry Environmental Conservation Association (IPIECA). The association recognizes the need for companies to “mitigate risk and deliver net benefit for all parties,” and has even published a Human Rights Training Toolkit. However, as the managing partner of operations in Block M, CNOOC has not lived up to IPIECA’s vision or its own claims in company Corporate Social Responsibility Reports.

The experience on Ramree Island is significant because of the expanding role of Chinese companies in Burma’s oil and gas sector. Investment overall in the sector has tripled in the last year with the Chinese being the fastest-growing investors. Chinese interests are central to plans for Arakan that include further exploration, the purchase of offshore natural gas reserves,

the construction of cross-country pipelines, and the development of a deep sea port. Exploration by Chinese companies is also underway in other areas of Burma. Burma is considered a “golden backyard” for China’s energy needs, potentially supplying a conduit to transport Middle Eastern and African oil as well as natural gas.

Although the regime has already earned billions from the oil and gas sector, Burma remains one of the poorest countries in the world, remaining economically and politically unstable. Investment from Chinese and other foreign corporations has not improved the lives of people in Burma or developed the country’s economy. On the contrary, it is enabling one of the world’s most corrupt military regimes to remain in power, fueling popular discontent and instability.

For any genuine development from oil and gas projects to take place, foreign governments and companies need to follow international standards to protect the environment and human rights and ensure revenues are used for the country’s development. However, without rule of law, accountability or transparency mechanisms in Burma, investors will find it impossible to avoid abuses and conflict similar to those that occurred in Block M. And they will continue to provide the military ruling Burma with its biggest source of foreign income.

# RECOMMENDATIONS

The Burmese military has no law to protect human rights or the environment from oil and gas exploration and other development projects. Rated as one of the most corrupt governments in the world, the military regime also has no rule of law. If foreign corporations or governments engage in the oil and gas sector in Burma, they should first ensure that:

## *Community Rights Are Protected:*

- Information is provided to and consultation conducted with affected communities before projects are implemented
- Affected communities are allowed to participate in the decision making process of oil and gas operations
- Local people receive equitable benefits from the projects
- Local people are employed in the projects

## *Revenue Transparency Is Ensured:*

- Records of receipts paid to the host government are made public
- Payments for oil and gas purchase or investments into oil and gas are projects managed by an independent third-party body
- Investment funds are transparent and reutilized for the country's sustainable development in such important sectors as education and health

## *Operations Follow Basic Standards:*

- The laws of the corporation's home country and international standards are duly followed, including the public disclosure of social and environmental impact assessments, the protection of women's rights, and the protection of cultural and historical sites
- Adequate compensation for relocation and property damage is provided directly to affected peoples
- All those employed to work on oil and gas projects in Burma should be protected under international laws per the agreements of the International Labour Organisation

## **Unless these basic provisions are ensured:**

- Chinese and multinational oil and gas corporations in Burma must stop investment and operations in Burma's oil and gas sector.
- Shareholders and investors should divest their holdings in the companies engaged in these projects, and banks should refrain from financing these projects.

## APPENDIX 1: Companies involved in Block M



### **Chinese National Offshore Oil Corporation (CNOOC)**

State-owned CNOOC is China's third-largest oil and gas company, its largest offshore oil producer, and largest natural gas supplier. The corporation conducts extensive domestic and overseas operations and employs 51,000 people. The Chinese government owns 70% of the corporation's shares. Shares of China National Offshore Company Limited (CNOOC Ltd.), one of CNOOC's four listed companies, are traded on the New York and Hong Kong stock exchanges.

The group's operational subsidiary in Burma – CNOOC Ltd. Myanmar – is the signatory to six production sharing contracts, including three onshore blocks. Separate production sharing agreements also grant CNOOC Ltd. and its partners access to several additional oil and gas blocks in Burma (see page-33).

In April 2008, Thailand's top oil exploration firm, PTT Exploration and Petroleum (PTTEP), and CNOOC signed a deal to swap their interests in oil and gas blocks in Burma. Under the agreement, PTTEP will swap stakes of 20 percent interest in the M3 and M4 blocks with the A4 and C1 blocks held by CNOOC. CNOOC still holds 61% stakes in the A4 and C1 blocks while PTTEP retains 80% in the M3 and M4 blocks.<sup>15</sup>

<sup>15</sup>“PTTEP, CNOOC swap stakes in Myanmar assets,” *Oil & Gas Journal*, April 10, 2008.

<sup>16</sup>“COSL Secures Well Service Contracts in Myanmar,” January 16, 2006, COSL, [http://www.cnoocs.com/pressroom/release\\_content.jsp?NewsID=46](http://www.cnoocs.com/pressroom/release_content.jsp?NewsID=46)

### **China Oilfield Services Limited (COSL)**

A fellow subsidiary of CNOOC Ltd., COSL is a major Chinese oilfield services provider, with a primary focus on offshore exploration and drilling services. Like many firms in the Chinese oil and gas industry, in recent years the company has been actively seeking to expand its overseas operations. COSL public shares are traded in the Hong Kong.

In a departure from its normal focus on offshore operations, COSL in 2006 signed contracts worth RMB40 million (approximately US\$5.3 million) with CNOOC for pre-drilling, drilling fluid, and cementing services in onshore Block M.<sup>16</sup>

In late 2005, COSL signed a reported \$US 6 million contract with Daewoo International for drilling services at the Mya well in the offshore A-3 block.



## **China National Petroleum Corporation (CNPC)**

State-owned CNPC is China's largest domestic producer and supplier of crude oil and natural gas and one of its largest producers of refined oil products and petrochemicals. CNPC also provides oilfield technical services and engineering construction, including geophysical prospecting, well drilling, logging and testing.

CNPC and its subsidiaries have been present in Burma since 2001 and currently have stakes in seven onshore and six offshore blocks (see appendix).

In June 2008 it was announced that CNPC would be the buyer of 5.4 to 9.1 trillion cubic feet of natural gas in the A-1 and A-3 blocks (the Shwe gas).<sup>17</sup>

The feasibility study for the natural gas pipeline from Arakan to Kunming has been awarded to the China Petroleum and Petrochemical Engineering Institute, the planning department of CNPC.<sup>18</sup>

CNPC and its subsidiary Chinnery Assets also won contracts to upgrade four old oilfields in central Burma. These companies are now at various stages of exploration and they have already made the financial commitment of US \$163 million.

## **China Huan Qiu Contracting & Engineering Corporation (HQCEC)**

HQCEC is a wholly-owned subsidiary of China National Petroleum Corporation (CNPC). The company's core businesses incorporate a wide range of oil-related activities, including the construction and maintenance of oil field facilities, oil refineries, and gas processing plants. In addition to being a member of the CNOOC led consortium of foreign companies that are exploring for oil in Block M, in 2004, HQCEC signed a US\$195 million contract with the SPDC for the engineering, procurement, and construction of a fertilizer plant.

## **Sichuan Petroleum Geophysical Company (SCGC)**

SCGC is a service provider specializing in seismic exploration engineering services, integrating geophysical data acquisition, processing, interpretation and scientific research. SCGC has 50 years of experience in seismic exploration. Headquartered in Chengdu City, the company has nearly 4,000 employees and is a leading part of CNPC. According to the company's website, it "has gained the seismic prospecting projects in Thailand, Myanmar, Pakistan and North Korea since 2003, and obtained wonderful results and good reputation."

SCGC conducted an estimated 10,000 seismic surveys in Block M during October 2004-March 2005 and has been contracted to conduct surveys in other blocks as well.

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<sup>17</sup> "CNPC Inks Natural Gas Cooperation Agreement with Myanmar," June 25, 2008, Xinhua News Agency

<sup>18</sup> *Ibid.*

## Sanction Hit Golden Aaron Pte. Ltd. Singapore and Asia World

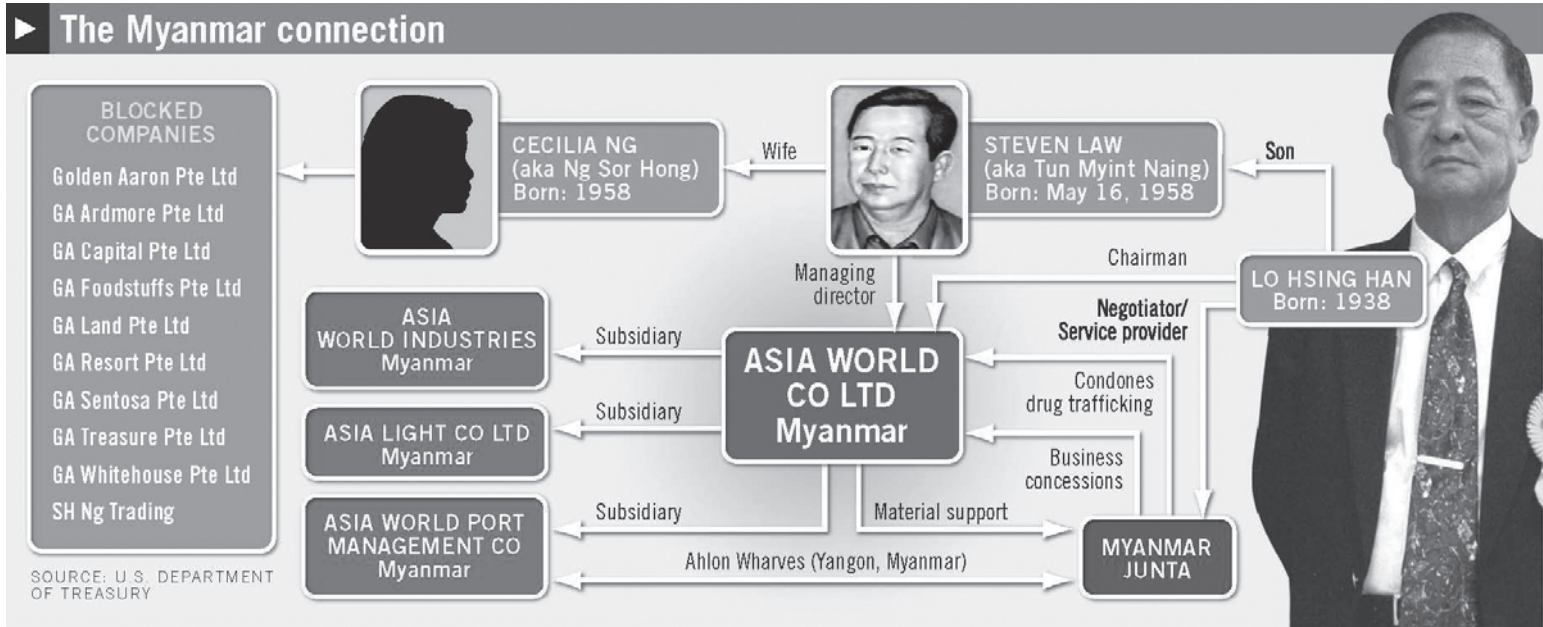
Golden Aaron is a consortium partner together with CNOOC Ltd. and a CNPC subsidiary in six onshore and offshore exploration blocks, including Block M.

Registered in Singapore in 1995, Golden Aaron Pte. Ltd. is owned and managed by Steven Law, a Burmese business tycoon, and his Singaporean wife Cecilia Ng.<sup>1</sup> In February 2008, the company, along with nine other companies owned by Ng in Singapore and Burma's Asia World Company owned by Steven Law, were sanctioned by the United States Department of Treasury for providing support to Burma's military regime.<sup>2</sup> Steven Law is the son of Lo Hsing Han, who the U.S. government calls the "Godfather of Heroin."

Asia World Company was founded by drug-lord Lo Hsing Han in 1992 and is now the largest private-sector conglomerate in

Burma. The company has strong links with Burma's military leaders. With interests in trading, manufacturing, real estate, industrial investment, construction, transportation, imports, and distribution, the company is involved in major contracts across Burma, often in partnership with Chinese companies. These include the building of roads and infrastructure for several hydropower dams in Kachin State and the renovation of Rangoon's international airport. The sprawling residences of military leaders Senior General Than Shwe and Vice Senior-General Maung Aye in the new capital of Nay Pyi Taw were built by Asia World.

Asia World has built roads and drilling sites as well as procured equipment for Block M operations and is reportedly currently involved in the development of the deep sea port on Maday Kyun Island.



## APPENDIX 2:

### Foreign companies with stakes in Burma's oil and gas sector

Country/Corporation [Parent company in brackets]	Stakes - Onshore Block	Stakes - Offshore Block
<b>China</b>		
-China National Offshore Oil Company (CNOOC) Myanmar Ltd [CNOOC] (British Virgin Islands registered)	C-1, C-2, M	A-4, M-2, M-3, M-4, M-10
-China National Petroleum Corp. (CNPC)	IOR-4	AD-1, AD-6, AD-8
-China Huanqiu Contracting and Engineering Corp [CNPC]	C-1, C-2, M	A-4, M-2, M-10
-Chinnery Assets [CNPC]	IOR-3, RSF-2, RSF-3	
-Sinopec Dianqiangui [Sinopec]	D	
<b>Singapore</b>		
-Golden Aaron Pte Ltd.	C-1, C-2, M	A-4, M-2, M-10
-IGE (Burma links)		A-5
-UNOG Pte Ltd (Burma links)		M-1
-Goldpetrol Joint Operating Company [Interra Resources/ Geopetrol Singu] (Panama/Netherlands/Australia linked)	MOGE-2	
<b>South Korea</b>		
-Daewoo International		A-1, A-3, AD-7
-Korean Gas Corporation (KOGAS)		A-1, A-3
<b>India</b>		
-ONGC Videsh [Oil & Natural Gas Corporation-ONGC]		A-1, A-3, AD-2, AD-3, AD-9
-Gas Authority of India Limited (GAIL)		A-1, A-3, A-7
-Essar Oil [Essar Global Ltd.]		A-2
-Sun Group	L	M-8



<b>Russia</b>		
-Silver Wave Energy/Silver Wave Sputnik Petroleum (Singapore registered, linked to India, British Virgin Islands) -JSC Zarubezhneft Itera [Zarubezhneft/Itera O&G]	B-2	A-7 M-8
<b>Malaysia</b>		
-Rimbunan Retrogas Ltd. (British Virgin Islands registered) -Petronas Carigali Myanmar [Petronas]		A-5, M-1 M-12, M-13, M-14, M-15, M-16, M-17, M-18
<b>Thailand</b>		
-PTTEP International Ltd. [PTT]	C-1	A-4, M-3, M-4, M-5, M-6, M-7, M-9, M-11, M-12, M-13, M-14
<b>US</b>		
-Unocal Myanmar [Chevron] (Bahamas registered)		M-5, M-6
<b>France</b>		
-Total E&P Myanmar [Total S.A.]		M-5, M-6
<b>Japan</b>		
-Nippon Oil Exploration Ltd. Myanmar [Nippon Oil]		M-12, M-13, M-14
<b>Australia</b>		
-Danford Equities Corp. [Twinza Oil]		YEB
<b>British Virgin Islands</b>		
-Focus Energy Ltd. (Switzerland/Burma links)	Htauksabin &Kanni	
-MPRL E&P Pte Ltd (Burmese)		A-6

## **APPENDIX 3: Estimated income for the military from the Shwe Gas Project (A-1 and A-3 Blocks)**

**Estimated income over 20 years: up to US\$26 billion**

### **Shwe Gas project stakeholders**

Daewoo International (South Korea):	51 %
ONGC Videsh (India):	17 %
Myanmar Oil and Gas Enterprise:	15 %
GAIL (India):	8.5 %
KOGAS (South Korea):	8.5 %

### **Calculations at 9.1 tcf**

Total revenue of sales: 9.1 trillion cubic feet x 0.001 x \$4.41 = \$ 40.13 bn

Construction costs = 1.3 bn

Operation costs = \$ 50 m x 20 years = \$ 1 bn

China transit fee to MOGE: US\$150 Million

**Shwe Consortium income before tax:** \$ 40.13 bn (revenue of sales) - \$2.3 bn (construction and operation costs) - \$ 4.013 bn (10% royalties) = \$ 33.82 bn

**Total MOGE net income:** \$ 5.07 bn (15% share) + \$ 4.013 (royalties) + \$ 12 bn (DI/ONGC 50% tax, GAIL/KOGAS 45% tax) + \$ 3 bn (pipeline transit fee) = **\$ 24.1 bn**

**Average MOGE net income over 20 years: \$ 1.2 bn/year**

In addition to these main costs, Daewoo International have paid a signature bonus, a production bonus and other undisclosed fees.

**-Explanation of tax income to MOGE—**

**Taxable yearly net profits by corporation (average over 20 years):**

Daewoo International:  $33.82 \times 51\% / 20 \text{ years} = \$ 862 \text{ million (50\% tax to MOGE)}$

ONGC Videsh:  $33.82 \times 17\% / 20 \text{ years} = \$ 287 \text{ million (50\% tax to MOGE)}$

GAIL:  $33.82 \times 8.5\% / 20 \text{ years} = \$144 \text{ million (45\% tax to MOGE)}$

KOGAS:  $33.82 \times 8.5\% / 20 \text{ years} = \$144 \text{ million (45\% tax to MOGE)}$

Total tax paid to MOGE years 4-20:  $\$ 4.88 \text{ bn} \times 45\% + 19.54 \times 50\% = \$ 12 \text{ bn}$

**Calculations based on the following data:**

-Gas reserves hold up to 9.1 Trillion Cubic Feet of gas.

-The China National Petroleum Corporation (CNPC) is reportedly paying US\$ 4.41 per million BTU to the Myanmar Oil and Gas Enterprise (MOGE).

-The gas has a heating value of 1,000 British Thermal Units per cubic foot (BTU/cf).

-Under the standard Production Sharing Contract, foreign corporations pay 10% royalty on the total sales price of the gas, to the Myanmar Oil and Gas Enterprise (MOGE).

-Under the standard Production Sharing Contract, foreign corporations pay annual 40-50% income tax on their net profits to the Myanmar Oil and Gas Enterprise (MOGE), during contract years 4-20.

-China will provide a transit fee of US\$150 Million for the gas pipeline.

-Construction and operating costs were based on input from a Myanmar oil industry analyst.

-All amounts calculated in US dollars







**The oil and gas sector is the single biggest earner of foreign revenue for Burma's military regime. Chinese investment in the sector is on the rise and oil exploration is ongoing.**

**This is the story of what happened on an island off the coast of western Burma and what it means for future operations by foreign firms hungry for oil and gas in Burma.**

**"Blocking Freedom is a substantial contribution to the increased debate on hydrocarbons in Asia. In the world, oil companies are accumulating billions of dollars, while rights of indigenous people are systematically violated. Arakan people inspire communities in faraway places, in fighting for justice."**

**Ivonne Yanez,  
OILWATCH SOUTH AMERICA**



**October 2008  
Arakan Oil Watch**