

SOLD OUT

Launch of China pipeline project unleashes abuse across Burma

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Cover Photo: pipeline delivery on west bank of Irrawaddy River in Magwe Division

construction equipment for deep sea port off Burma's western coast

2,800 kilometers Length of pipeline to carry natural gas from Burma to China



About Shwe Gas Movement and this report

The Shwe Gas Movement (SGM) is a community based organization campaigning against the Shwe Gas Project and China's Trans-Burma Pipelines, for Human Rights, Environmental Justice, and revenue transparency in the oil and gas sector. SGM specializes in fact-finding, training grassroots and community leaders, and advocacy campaigns. Its members include the All Arakan Students' and Youths' Congress, Arakan Oil Watch, and dedicated activists in Burma.

Local researchers from the project area conducted extensive interviews with farmers, fisherfolk, day laborers, homemakers, and community leaders in affected regions of Arakan and Shan states from early 2010 through 2011. This report is based on those interviews as well as constant monitoring of project developments on the ground, including impacts to affected communities. Complaint letters, land documents, project diagrams, and construction photos were also collected by local researchers and networks. Additional desktop research analyzed company websites, relevant previous studies, and media reports.

Burma's military government is exporting massive world-class natural gas reserves found off the country's western coast, sacrificing the country's future economic security and dashing chances of electrification and job creation. The "Shwe" offshore fields will produce trillions of cubic feet of natural gas that could be used to spur economic and social development in one of the world's least developed nations. Instead it will be piped across the country to China, fuelling abuses and conflict along its path.

onstruction of various project components to extract, process, and export the Shwe gas - as well as oil trans-shipments from Africa and the Middle East - is now well underway. Local peoples are losing their land and fishing grounds without finding new job opportunities. Workers that have found low-paying temporary jobs are exploited and fired for demanding basic rights. Women face unequal wages, discrimination in the compensation process, and vulnerabilities in the growing sex industry around the project.

Resentment against the so-called Shwe Gas Project is growing and communities are beginning to stand up against abuses and exploitation. Despite threats and risk of arrest, farmers and local residents are sending complaints to local authorities. Laborers are striking for better pay and working conditions and women running households are demanding electricity.

Meanwhile active fighting has broken out between armed resistance groups and government troops in the area of the pipeline corridor in northern Burma.

The Korean, Chinese and Indian companies involved in this project are taking tremendous risks with their reputations and investments. Social tensions, armed conflict, human rights abuses, and lack of project standards have raised concerns in investor circles and caused at least one pension fund to divest from the Korean firm Daewoo International, the main developer of the gas fields.

Genuine development can only be achieved when community rights and the environment are protected, affected peoples share in benefits, and transparency and accountability mechanisms are in place. The Shwe Gas and China-Burma Pipelines projects must be suspended and all financing frozen or divested until such conditions exist.



Offshore Gas Drilling Facilities

What: Multiple drilling rigs and 40,000-ton platform will facilitate extraction of gas from beneath the sea.

Status: Construction of rigs presently underway. **Who: Daewoo International** gave Hyundai Heavy Industries turnkey contract to construct offshore platform and undersea infrastructure; Japan Drilling Company drilling in A-3 block from February-April, 2011; **Burmese military** enforcing restricted access to the area.

Kyauk Phyu



Deep sea port and oil storage facilities on Maday Island

What: Development of deep sea port to allow large ships to offload Middle Eastern and African oil at an oil terminal; network of large roads across the island to connect various construction sites.

Status: Construction began in October 2009. To date, a large foundation has been laid for port off-loading and oil storage facilities; road construction is underway.

Who: China National Petroleum Corporation (CNPC) contracted construction to Hydro China Co. which sub-contracted transportation of materials (sand, stones, etc.) to Burmese companies Thandar Nga Ghar and Pyidawsi. Asia World building a reservoir system.

Maday

Island



What: A 110km undersea pipeline will transport natural gas to the terminal at Kyauk Phyu on Ramree Island.

Status: Pipeline under construction; area of undersea corridor restricted to fishing and other vessels.

Who: Hyundai Heavy Industries under contract to **Daewoo International** for construction.



Onshore Gas Terminal Complex Ramree Island

What: Onshore pipeline connects undersea pipeline to an onshore gas terminal. **Status:** Onshore pipeline is being constructed through Liekkhamaw and Gonchwein village tracts; approximately 200 acres of land confiscated and cleared for the route. Onshore Gas Terminal (OGT) is currently under construction on 108 acres of land near Liekkhamaw and Marakyaun villages. Housing facilities for 600 workers built on the outskirts of Gonchwein village.

Who: Facilities built by Hyundai Heavy Industries for **Daewoo International**; manual labor sub-contracted to Burmese companies including Myanmar Golden Crown (MGC),) and Petroleum Services Consultancy (PSC).



Pipes on route to central Burma

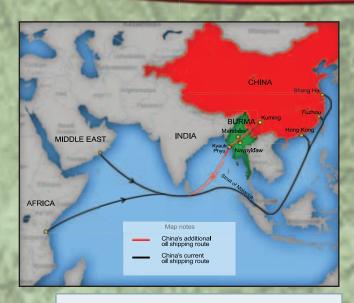
Tat Taung



The pipeline corridor will allow Chinese importers to transfer not only the Shwe Gas but also oil from the Middle East and Africa across Burma, avoiding the Straits of Malacca (see inset map). Much to its frustration, although India is closer to the source of the Shwe Gas, the Indian government was unable to compete with China in negotiations for the purchase of the gas.

Infrastructure on Maday Island

A bridge joining Kalabar Taung and Maday Island is under construction and a new police station between Rawma and Pyin villages on Maday Island has been built.



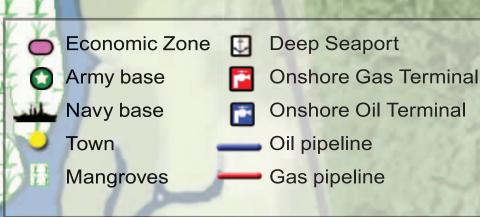
Burma-China Pipeline Corridor

What: A 2,800 kilometer pipeline will pump 12 billion cubic meters of natural gas annually to Nanning, where it will be used to generate electricity to be distributed in southwestern China, greatly contributing to that region's development. An additional 1,100 kilometer pipeline will transport an estimated 22 million tons of oil annually from Africa and the Middle East to a refinery in Kunming.

Status: Construction of the Burma-China Oil and Gas Pipelines began in June 2010 in Burma and in September 2010 in China, and are due to become operational in 2013. Huge trucks have been transporting pipes into Burma from China at the border crossing of Muse since May this year.

Who: The state-owned China National Petroleum Corporation (CNPC) will oversee all aspects of the corridor construction and operation.





RECIPE FOR ECONOMIC RUIN

Extractive industries export finite resources raw, leaving no opportunity to build up secondary industries such as processing facilities that would add value and offer larger employment opportunities. An extractive industry combined with abuses which directly affect financial well-being exacerbates an already enormous gap between wealthy and poor – creating a perfect recipe for economic ruin and contributing to migration.

MADE JOBLESS

The majority of people in Arakan State rely heavily on both fishing and farming to gain income and sustain their families. Both these industries are now being destroyed, leaving residents jobless and without income. Yet oil and gas projects and their associated infrastructure have not provided alternative employment opportunities. Those who can get jobs find they are low paying, unsafe, and temporary. This is leading to increasing migration as families seek ways to survive.

"Our lands were taken and our fishing grounds restricted, now we are jobless. They promise jobs, but the jobs are short-term and don't pay well. Some of the local men - including my son - have gone to Malaysia or Thailand seeking work." (farmer from Maday Island who lost his land to the Shwe project)

Off limits to locals: fishing industry threatened

A number of fishing grounds off Ramree and Maday islands have been classified as restricted access zones; enforcement is implemented by the Thitpouttaung navy battalion. Navy patrols are also harassing and "taxing" local fishing boats, making it difficult and more expensive for local fishers to carry out their business.

The bay around Maday Island has traditionally been used as safe passage for fishing boats due to its natural protection from high winds and storms. Increased Navy patrols and extortion have forced boats to take an alternative route around the outside of Ramree Island which is significantly more dangerous in heavy weather and adds to transportation costs.

The development of the deep sea port may attract larger businesses and foreign-owned trawlers to the Arakan fishing industry, posing another threat to local fishers. Businesses connected to the military will increasingly dominate control of fishing blocks and collect taxes on local fishers. In a May 2011 public auction, the Arakan state government gave priority to members of the ruling Union Solidarity Development Party and close associates in bidding for fishing blocks across Arakan State for fiscal year 2011-2012.1

Local agriculture torn to pieces

Thousands of acres of farm lands have been confiscated in Arakan and Shan states as well as Magwe and Mandalay divisions to clear areas for the pipeline and associated infrastructure. Fields have also been made inaccessible; on Ramree Island the amount of land classified as "restricted access" by local authorities has recently increased in the areas around Sichoun, Sittaw and Ngagamaw villages. Construction equipment and trucks have ridden roughshod over fields, destroying crops and damaging soils. Some farmers have been prevented from harvesting crops in fields adjacent to construction areas. Companies have also dumped waste materials on paddy lands.

"Some large foreign ships working on the construction of the gas pipeline carelessly go to and fro within our fishing areas. Our fishing nets have been torn apart by the ships' anchors and cables and no one has gotten any compensation for this. We don't dare to lay our nets now." (fisherman from Gonchwein village)



NO NEW JOBS

Extractive Industry companies typically import workers and export resources and profits, leaving little benefit for local people. The Shwe project follows this pattern. Project companies have made little effort to develop the local labor base through job training and knowledge-transfer and thousands of workers from China and central Burma have been brought in, leaving few opportunities for local people to receive any stable and/or skilled employment in the project.

Limited low-wage, temporary, unsafe jobs

The vast majority of local people can only get construction jobs, involving hard labor such as breaking and carrying stone. These unskilled positions have no job security and offer low daily wages (on average 2,500 kyat around US\$3). Worksites are dangerous and little has been done to address workplace health and safety issues. In early 2011 a woman working on a construction site on Maday Island was hit by a company car and badly injured. She was given only 2,000 kyat (around US\$2) for her healthcare expenses. Construction jobs are also by nature temporary; the export of the gas precludes creation of more stable long term job opportunities.

"The companies piled up earth embankments to build the roads for their project causing all the paddy farms along the roads to flood when it rained. The irrigation canal and drainage ditch was also blocked by the road building — making it impossible to drain off flood water in rainy times or irrigate crops in the dry season." (local farmer from Kyauk Phyu)

"Compensation" or ruin?

One-time cash compensation offered in return for seizure of a family's land and means of livelihood is not adequate and in some cases leads to complete economic ruin. For example, a family from Maday Island bought a fishing boat with the compensation money they were given but soon afterwards the boat was completely destroyed by Cyclone Giri, leaving the family destitute. In another case a family from Gonchwein village bought a motorcycle which was destroyed in a fatal accident.

No economic development

The long-standing lack of clean water access, poor public health facilities and inadequate electricity grid coverage in the project area have not been improved with the arrival of the Shwe Gas Project. Natural gas could be used for domestic energy needs and to spur local economic development which, if managed properly, could lead to sustainable long-term economic development. Public investment should be a motor of economic growth, yet it remains at negligible levels, leaving Burma ranked among the Least Developed Countries in the world.



KYAUK PHYU SPECIAL ECONOMIC ZONE (SEZ)

What: A proposed zone which will encompass nearly half of Kyauk Phyu Township where foreign companies will establish petrochemical plants and facilitate the export of Chinese-produced goods (see map). It will house expanded naval facilities and be the end-point of the Yunnan-Arakan railway.

Status: On February 16, 2011, China and Burma signed a "supplementary contract to a Memorandum of Understanding on the Kyauk Phyu Economic and Technological Development Zone and related port and railroad development projects." Details of the contract have not been released. Land speculation in and around the proposed zone has begun although local people have been left completely in the dark about the SEZ plan and the ultimate effect it will have on their lives.

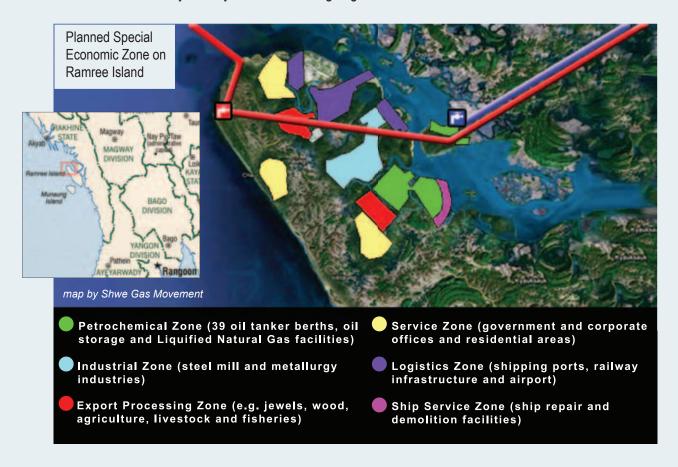
Who: The CITIC Group, a massive Chinese state-owned investment bank, has the contract with the Myanmar Ministry of National Planning and Economic Development to develop the zone and has made a promotional video of its plans for Kyauk Phyu.

Special Zone: For who?

Burma's Special Economic Zone Law was enacted in 2011 in order to encourage more foreign direct investment and offers special concessions and tax incentives to companies investing in these zones. The law stipulates that investors have a responsibility to increase the number of skilled "locals" to 25% ten years into the project. However "local" is defined as "national," therefore there is no guarantee that local communities will benefit from any jobs, let alone high-paying or skilled ones.

Land speculation and confiscation pushes out locals

As corrupt officials and businessmen vie for prime real estate near special economic zones and land prices skyrocket, local people are forced off their lands by a "market-based forced relocation." Property speculation and purchase in connection with the Kyauk Phyu Special Economic Zone has begun along the Kyauk Phyu coastline and also in the Tavoy SEZ in southern Burma. At the same time outright confiscation of lands in the zone by military authorities is ongoing.



Migration and displacement

While industries are built in neighboring countries using gas from Burma, people from Burma are fleeing the economic crisis within the country by the millions. An estimated two million migrant workers from Burma have fled to Thailand, with another one million residing in Malaysia, China, India, Bangladesh and Singapore. The Shwe project is depriving people of their normal economic activities and not providing any substantial employment, contributing to increasing rate of migration out of the state. As people desperately seek a means of survival, they are recruited to work on plantations and in mines in other states of Burma. Far from home, these workers are exploited by employers who pay them low or no wages.

According to a 2007 Internal Displacement Monitoring Centre survey on causes of displacement in Arakan State, people cited food insecurity (87%), economic motive (78%), human rights violations (69%), forced labor (67%), extortion/heavy taxation (67%), and land confiscation (54%) as the main drivers of their displacement.2



"I must stay in this village because i have to look after my young children but many others have gone to Malaysia as migrant laborers or to Kachin State to work in the mines." (Maday Island villager who lost his land to the Shwe project)

"Since they have no freedom to earn their livelihood from their surrounding lands, forest, mountains, ponds, creeks, rivers, or the sea, and have no other jobs, they have to leave their homeland for opportunities elsewhere just to survive." (U Hla Saw, General Secretary. Rakhine **Nationalities** Development Party)



Living conditions for local workers



Living conditions for Chinese workers





A CORRIDOR OF POWER

Traversing 793 kilometers across the country, a corridor for dual gas and oil pipelines will be carved out of areas of active conflict between armed ethnic armed forces and Burma's notorious army. Currently 33 Burma Army battalions are deployed in 21 townships along the corridor route. It is expected that additional troops will be deployed to guarantee security of the pipelines, especially near pumping stations and other centers of operation. This increased presence is set to inflame conflict with armed groups active in areas within or adjacent to the corridor and to increase incidences of abuses against local populations.

Securing investments fuels further conflict

The deployment of government troops to secure foreign investments in ethnic areas has fuelled the existing conflict and sparked new resentment against these unpopular projects in several areas of Burma. For example the presence of troops to escort Chinese technicians for the Irrawaddy Myitsone Dam, together with a deep-seated opposition to the project by the Kachin people, prompted the Kachin Indpendence Organization to warn the Chinese government in March 2011 that civil war could erupt if dam construction proceeded. In December 2010, the Karenni National Progressive Party attacked a convoy of Burma Army trucks transporting Chinese surveyors to the Ywathit Dam on the Salween River.

The deployment of Burmese troops is not the only potential flashpoint for conflict: Chinese naval and military presence in Burma to protect Chinese investments could create further tension. So far, the Chinese government has requested regular access to ports in the Bay of Bengal for its navy as "anti-pirate" patrol vessels which may anger neighbors India and Bangladesh. The use of Chinese armed forces on foreign soil to secure investments is increasingly discussed among Chinese military strategists and is not without precedent. For example, armed Chinese soldiers were present at the 2009 inauguration of a US\$3 billion CNPC oil project in Wasit, Irag.

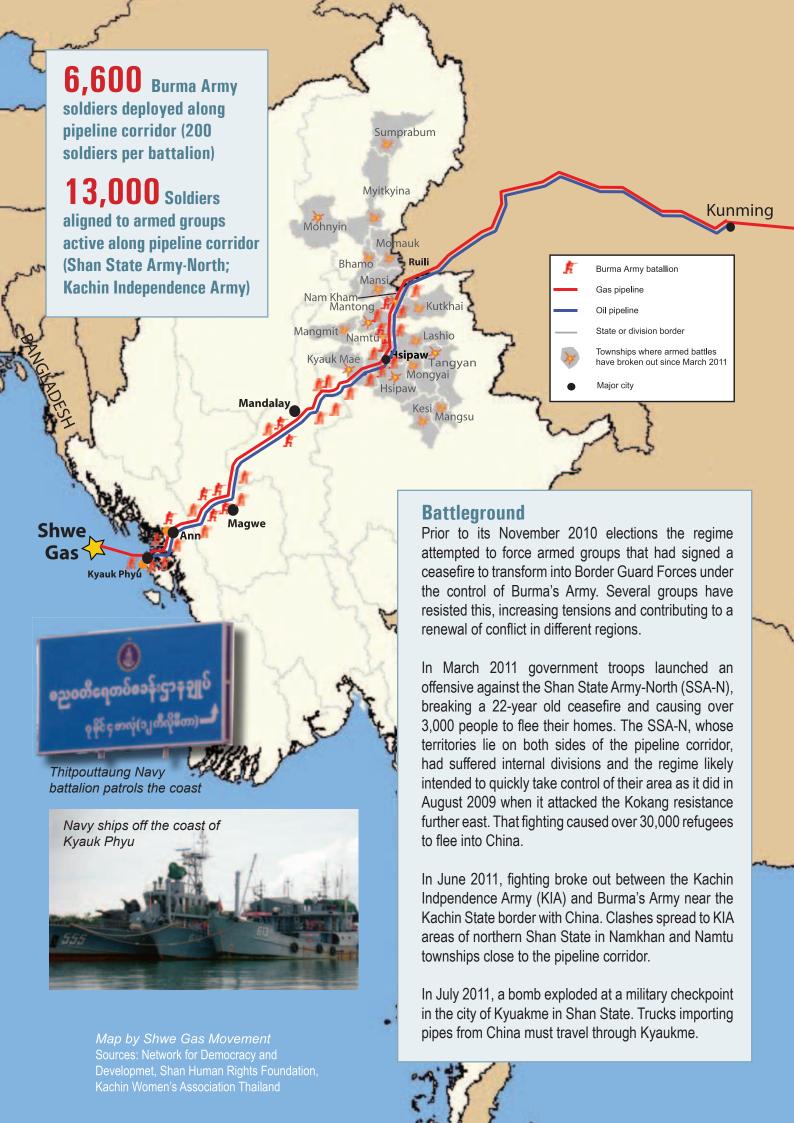
Increased military, increased abuses

It has been well documented that an increase in militarization leads directly to increased abuses against local populations in Burma, including seizures of farm land, forced relocations, forced labor, torture and sexual violence.³ Villages

suspected of supporting resistance forces are also shelled and burned down. The Burma Army is currently forcing civilians to work as porters in the fighting in northern Shan State near the pipeline corridor and there have been numerous recent incidents of rape in Kachin and Shan states. Abuse is also unfolding in Arakan State where both Army and Navy battalions secure project components and infrastructure at the start of the pipeline corridor (see following pages).

Risks to investors in a war zone

Due to the failure of the regime to address the genuine political concerns of opposition and ethnic groups, Burma remains an unstable business environment. As the recent fighting illustrates, armed conflict can break out at any time, posing enormous risks to foreign investments. Projects may be delayed and or temporarily or permanently halted due to conflict and the safety of project personnel suddenly called into question. In early June, after fighting broke out between the Burma Army and the Kachin Independence Army, 30 Chinese engineers became trapped for three days at the Dapein Dam and hundreds of Chinese workers have had to abandon construction sites. Personnel may also be targeted for attack or kidnapping. In early May 2011, four Chinese engineers went missing from the Tasang Dam site on the Salween River in Shan State, having been abducted by an armed group. These cases highlight the potential danger for company personnel working in conflict areas. In addition to personnel, project equipment and infrastructure is also at risk. In April 2010, multiple bomb explosions at the Irrawaddy Myitsone dam destroyed a communications office and several trucks.



ABUSES HAVE BEGUN

Increasing militarization leads to human rights abuses in local communities. A range of abuses connected to the project are currently unfolding and are set to increase if the project progresses. These include forced labor, forced eviction and land confiscation, arbitrary taxation, repression of freedom of expression, arbitrary arrest and imprisonment, and physical abuse.

Forced labor

Forced labor has been used for the construction of project-related roads in Arakan State and to build pipeline related infrastructure in Magwe Division. In late 2010, policemen from Maday Island began collecting money from local people to fund the construction of a permanent police station. When local people could/did not give money to the police, they were forced to join labor squads to construct the station.

Land confiscation and forced eviction

Land confiscation and forced eviction is being carried out by local government authorities, company representatives and the police. People living on Maday and Ramree islands have so far been the most affected in Arakan State. Since March 2011, local authorities have been marking off lands in Mungwe Township of Shan State and villagers fear that their farm fields will be seized. In other villages of Shan State, lands have already been taken to make way for project-related roads and military camps.

There are also reports of land confiscation for initial clearing and construction activities for the pipeline corridor in central Burma. In Magwe Division, construction has begun on local properties but villagers have received only partial or no compensation.⁴

Beatings and killings

In December 2010, 26-year old Ko Muang Wong was shot dead at the Japanma jetty (Kyauk Phyu Township) by a Sergeant from Light Infantry Battalion 542 simply for not stopping his boat immediately when approached by soldiers on the water. The soldiers were out collecting arbitrary taxes on fishermen.

In early 2011, a man who complained about his lands being confiscated in Kyauk Maw Gyi on Maday Island was beaten and seriously injured on the orders of the local Lieutenant.

Exploitation and threats to workers

Workers on project sites are forced to work overtime with no pay and are threatened if they complain about their working conditions. In September 2010 twelve construction workers in Kyauk Phyu employed by a subsidiary of Daewoo International were fired after they publicly complained about not receiving wages owed to them. The workers first approached the company but couldn't meet any officers; they then went to the local Labor Department which refused to take any responsibility. The workers subsequently had their homes broken into by company representatives and were publicly shamed on a village notice board. In February 2011 thirty workers in Kyauk Phyu were blacklisted after complaining about not receiving regular wages. The laborers had been promised 5,000 kyat per day but only given 2,500 kyat and not paid for overtime work. Until today, 60 workers have been fired at the Onshore Gas Terminal site

"I and three of my friends were fired for complaining. We were singled out as troublemakers and our photos were posted on a notice board to shame us." (Former construction worker fired by PSC Company, a subsidiary of Daewoo International)

Land confiscation process in Namkham Township, Shan State

In May 2010, thirteen farmers in Namkham Township of northern Shan State were herded to a township courthouse and forced to sign documents giving away the means of their families' survival: farmlands which provided them an annual income of 500-600,000 kyat per acre from cultivating rice paddy and seasonal crops. The lands had been marked off to make way for an army security camp along the pipeline route and were confiscated in a hasty procedure which the farmers did not understand and could not refute.

Land and Agriculture Department officials, lawyers, police officers, local administrators, and a Chinese businessman surrounded the farmers at the courthouse. A document stating that the land was to be confiscated was read aloud in Burmese and the farmers were instructed to sign four different Burmese-language agreements "handing-over" their land. Some complained that they didn't understand the documents and they were concerned about receiving compensation. After one villager refused to sign, a township official immediately offered to compensate the villagers at a rate of 40,000 kyat per acre. It was impossible for any of the farmers to further refuse to sign or even to ask for further clarification; the presence of government officials and police made them too afraid of the consequences.



"I am so worried about losing our land; I can't eat or sleep well. Even our headmen can't help. They said if we don't sell, anyhow this land will be taken because all land in the country is the property of the government." (farmer from Shan State)

Most villagers in the area are worried that more land will be confiscated in the future and are very unsatisfied with the small amount of compensation. Based on the income they earn from their land every year the villagers made a proposal for the compensation to be paid out over time in order to act as a substitute for this income and to give them time to transition to a new livelihood activity (500,000 to 600,000 kyat per year for 6 years equaling 3-3.6 million kyat per acre in total). They worry that if they are forced to sign away their land without adequate compensation, they will not be able to support their families.

Land confiscation by Infantry Battalion 34, Arakan State

Soon after the announcement of the development of the Shwe Gas project, residents of Gonchwein village were informed at a meeting that their land would need to be used for the project. The meeting was attended by many high-ranking influential people including General Lwin Thee (Ministry of Energy), Thaung Aye (Western Commander), General Myint Swe, company members (Burmese, Chinese and Korean), township officials, and armed soldiers. The meeting sent a clear message to local people that confiscation was done with the authority and support of the military government, and that any opposition to the confiscation process amounted to opposition to the military.

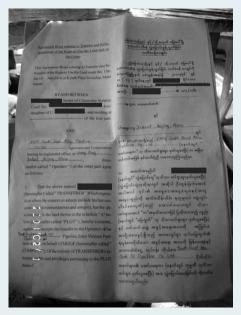
While most land confiscation to date has been done by local bureaucrats and company representatives, in some cases, the military is directly involved. For example during the last week of December 2010, soldiers from Infantry Battalion 34 - led by Lieutenant Zaw Myint Htoo - forcibly seized paddy land from five families in Gonchwein village with the stated intention of creating a military shooting range. After using the land as a shooting range for just 3 days, the battalion sold the land to Myanmar Golden Crown (MGC) Company, a subcontractor of Daewoo International doing road and pipeline construction. Although farmers complained to the Western Commander, local government offices, and the companies involved in the confiscation, there has been no response.



Paddy land taken by the military and then cemented over by Shwe project company



Documents were brought by representatives of CNPC-Southeast Asia for the confiscation of land from Maday Island residents. The CNPC office on the island is pictured above.



"Agreement Bond relating to the transfer and relinquishment of the right to use land and/or crops":

"Therefore, **TRANSFERER** hereby declares that he/she relinquishes any and all of his/her interests, rights and privileges in, or in connection with the PLOT and/ or the crops thereon, in consideration of the compassionate compensation furthermore received and declares that he/she will vacate and give up peaceful possession of PLOT upon five (5) days notice in writing by the COMPANY."





Local roads are destroyed by large machines making them impassable



"Local people are often not aware that they are being cheated. People are poor here, and many think that the small amounts of compensation being offered is a large sum of money because they have never seen such a large amount of cash in their lives. It is hard for them to imagine the future potential problems and dangers. They think they will be well-off with the compensation, yet for some people the money has already disappeared." (Gonchwein village tract resident)



"We farmers rely on cultivation. As we could not cultivate this year, not only did we lose our income but we could not save seeds for next year. This is making it difficult for our daily survival and parents cannot send their children to school." (local farmer from project area in Arakan State)

To: Commander, Western Military Headquarters

Rakhine State
Date: 7th January 2011

Subject: Objection to Myanmar Golden Crown (M.G.C) Company conducting business on lands that have been cultivated by families for three generations

1: We, from Gonchwein village, Kyauk Phyu Township, Rakhine State have been cultivating on freehold lands holding numbers (23/1) and (141) since our grandparents' reign. Recently, on 1st January 2011 Myanmar Golden Crown (M.G.C) Company began excavating with bulldozers on our paddy fields and hillside cultivation lands. The excavation was conducted in order to build a water refinery factory.

2: We appeal for mercy to forbid/prohibit the people (companies) who are working on our paddy fields and hillside cultivation lands without permission.

Respectfully,

[signed by five residents of Gonchwein village]

Submitted with land tax receipts attachment Cc:

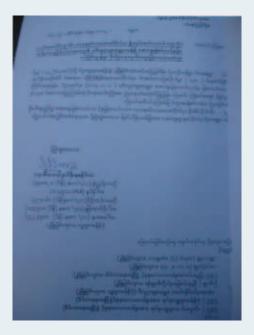
Tactical Commander (No. 3 Tactical Center, Kyauk Phyu) Battalion Commander (IB.34 / Kyauk Phyu Township)

Chairman of committee (Township Peace and Development Council – Kyauk Phyu)

Township officer (Land Record Department – Kyauk Phyu) Managing Director Myanmar Golden Crown (Gonchwein village - Kyauk Phyu)

Chairman of committee (Gonchwein village tract Peace and Development Council)

Chair of committee (Leik Kha Maw village tract Peace and Development Council)





1/2 pay

Women get paid half as much as men for work on the Shwe project



90%
of Arakan
households
need to collect
firewood in
order to cook



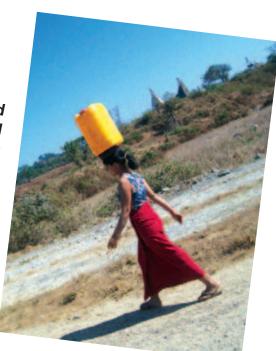
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Smoke in the kitchen

According to the Asian Development Bank, over 90% of people in Arakan State use firewood for cooking fuel, which produces high levels of indoor pollution. Since women spend more time cooking over stoves burning firewood, they disproportionately suffer more exposure to smoke than men. According to the World Health Organization, women exposed to indoor smoke are three times more likely to suffer from Chronic Obstructive Pulmonary Disease (COPD), such as chronic bronchitis, than women who cook and heat with cleaner fuels, such as electricity or gas. Using cleaner fuels, such as the Shwe natural gas, would drastically reduce the risks to women's health in Arakan State.

IMPACTS ON WOMEN

Decrease in household income due to land confiscation, forced labor, and environmental degradation has specific impacts on women and girls due to existing gender inequalities in local societies that favor boys and men. For example, girls are often the first to be pulled out of school when a family's income declines. Economic hardship within a family is also a contributing factor to increased rates of domestic violence. Other specific impacts on women are outlined below.



Unequal jobs, unequal pay

Economic hardship often deepens female dependence on male members of households who are generally more mobile and able to gain cash-based employment opportunities. Even when women can get jobs, they are often paid less for the same work. For example, female laborers employed to transport sand and gravel at the Maday Island construction sites are paid 1,000 kyat per day while male laborers are paid 2,000 kyat per day.

Intimidation, harassment, violence

Increased military presence around extractive industry projects in Burma directly correlates with physical and sexual violence against women. Along Burma's Yadana and Yetagun gas pipelines, troops from Burma's Army have sexually assaulted women, largely without punishment.⁵ In addition to troops, project workers can also abuse women without repercussion. There are already reports of foreign project staff harassing local women. In February 2011 a foreign worker sexually harassed a local woman in Kyauk Phyu. The woman tried to complain to the local authorities but the foreigner bribed the local authorities and also her family to keep her quiet. In July 2010 a foreign staff attacked a woman working at the Oil Terminal project on Maday Island but she was able to escape.

Increase in sex industry

An influx of male workers into the project area has increased the demand for sex workers who are overwhelmingly female. A proliferation of karaoke rooms and massage parlors are servicing male workers of the Onshore Gas Terminal in Kyauk Phyu and twenty women are sent to Maday Island every day to service workers there. One parlor in Kyauk Phyu town is owned by the commander of the local military batallion IB 34; a police officer is a business partner.⁶

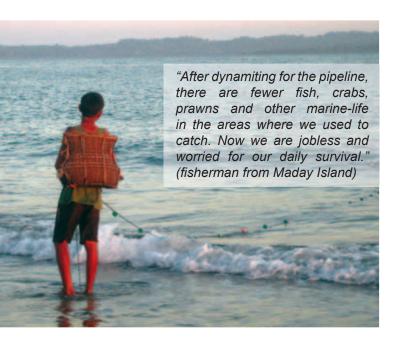
Female sex workers are vulnerable to contraction of sexually transmitted diseases from clients that refuse condom use and to violent clients. The illegality of sex work in Burma adds to the dangers of these jobs, as woman can be threatened, extorted from, and arrested. As demand for sex workers increases, the incidence of forced sex work and/or trafficking for sex work may also rise. Currently women are "imported" from Rangoon.

Unequal effects of displacement

The insecurity caused by displacement and the loss of farm lands is often more difficult for women than men as they tend to be responsible for farming and providing food for children; they also often rely on shared community resources such as forest areas which become inaccessible after relocation. As the companies and military move into the project area, they have offered some cash compensation to some families. This cash almost always is given to the "head of the household," who is male.

ENVIRONMENTAL DESTRUCTION

Several environmental dangers of oil and gas extraction and transportation pose threats at a national scale. Clearing forest areas and animal corridors for the pipeline route and the potential for explosions and leaks could impact areas across the country. Oil spills and waste disposal off the coast endanger the entire catchment area of the Bay of Bengal.



Dynamiting coral reefs for undersea pipeline

An estimated one third of the coral reefs three miles north of Kyauk Phyu town have been seriously damaged due to dynamite dredging used to clear the route for the undersea natural gas pipeline. The reefs are approximately one mile long and provide crucial habitat for fish and marine life (coral reefs cover 1% of the ocean floor yet provide habitat for 25% of all marine life), and are therefore crucial to the sustainability of the local fishing industry. Prospects for the development of an eco-tourism industry in this part of Arakan State will disappear with the destruction of the coral reefs. The reefs also function as natural barriers to large waves generated by ocean storms.

River dredging and aggregate mining

Freshwater rivers located further from the project sites, including the Maee, Ann and Lamu, are being dredged for sand, gravel and other aggregates for the construction of the foundation

of the deep sea port and oil storage facilities on Maday Island. Dredging has lasting impacts on the health of rivers as the river floor is an important breeding ground for a variety of local freshwater fish, eels and turtles. The mining of hills and mountain tops for aggregates has also radically altered the landscape on Maday Island (see photo at right).

Cutting through forest ecosystems

The pipeline corridor will pass through the Arakan Yoma section of the Western Mountain Range of Myanmar, which is part of the Eastern Hindu Kush-Himalayan eco-region. The area is sparsely populated and contains some of the most extensive tracts of uninhabited forest in mainland Southeast Asia, providing habitat for an abundance of flora and fauna including a number of at risk and endangered species. The development of the corridor and its related network of roads through this fragile and important eco-region will destroy habitat, increase wildlife poaching, segment ecologically sensitive areas and animal passageways, and increase deforestation and soil erosion.

Ruining coastal and riverine ecosystems

Fuel discharge as well as oil leaks and spills from the tankers offloading at the deep sea port will have devastating impacts on the coastal ecosystem, particularly mangrove forests. The development of large-scale petrochemical facilities on Ramree and Maday islands increases the likelihood of deadly spills or outright dumping of toxic materials into the sea and local waterways. Species under threat include the critically endangered Arakan Forest Turtle (Heosemys depressa); endangered Burmese Roofed Turtle (Kachuga trivittata); and the Nga-Pha-Yone (Synaptura commensoniana).

DISASTERS WAITING TO HAPPEN

Cyclone Nargis in 2008 and Cyclone Giri in 2010 both painfully illustrate the vulnerability of Burma's coast. The destruction of coral reefs and coastal mangroves increases this vulnerability by destroying natural protection barriers against destructive storms thereby exposing not only populations onshore but also infrastructure itself to devastating winds and waves.

The deep sea port lies in the middle of one of Burma's largest contiguous mangrove forests. The Rakhine mangroves, 60,000 acres in size, are critical for coastal protection from monsoon storms and cyclones. Some of the forests have already been destroyed to make way for infrastructure and any future oil spill in this area could devastate this vital ecosystem.

The risk of earthquakes causing major damage to the Shwe coastal infrastructure and/or pipelines is a real concern. A continental convergence plate boundary fault lies below the seabed near the offshore gas fields and extends under a substantial section of the pipeline corridor which also tracks across another plate boundary fault further along its route: the Sagaing fault.





Arakan mangroves protect from storms

The risk of rig destruction, explosions and spills is therefore high and to date no assessments or preparations for such scenarios have been disclosed. Indeed, as seen by the response to Cyclone Nargis and the 2011 Shan State earthquake, the regime has no disaster preparedness or rapid response plans for disasters, be they natural or man-made. It is also unknown if potential points of failure have been identified or any mitigation plans developed for the Shwe Gas and Pipeline Corridor projects.

Signboard at project site (below) reads "save the environment" yet forests are clearcut (right) to make way for deep sea port infrastructure



RISKY BUSINESS

In addition to the risk of open armed conflict in project areas, there is potential for insecurity of project personnel and destruction of project infrastructure. The broader dangers of complicity in human rights abuses, contributing to social unrest, and damage to the reputation of companies and governments involved all make these projects a risky business. On the ground, local tensions and resentment are also rising.

Social unrest

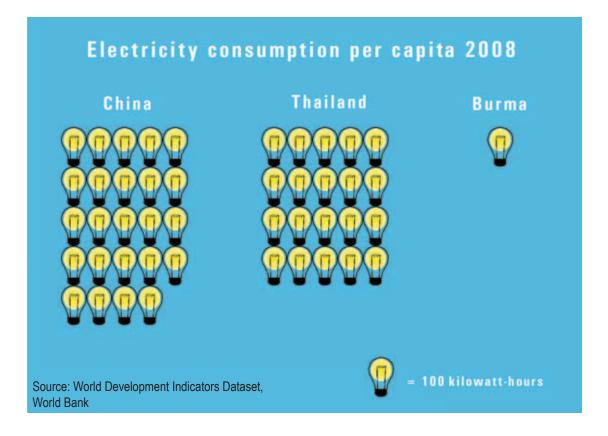
Extractive industry projects, particularly those in the energy sector, are extremely unpopular in Burma due to the export of energy resources in a country that lives with chronic energy shortages. Uprisings involving thousands of monks and citizens pouring onto the streets in major cities of Burma in 2007 were sparked by the dramatic increase in consumer prices for diesel and petrol. Although the "Saffron Revolution" was crushed by the regime, protests continue. Demonstrations against electricity shortages in Mon State in 2011 stood in stark contrast to the export of that state's natural gas reserves to neighboring Thailand. Foreign ownership and benefit, coupled with the lack of participation and censure on discussions around these projects, continue to make them targets of resentment and thus risky ventures for the companies involved.

Local resentment and conflicts

In April 2007 a group of 40 local residents outraged at the confiscation of their land by a Chinese company exploring for oil in Arakan State entered the company's facility at Renan Daung and destroyed equipment at the site. The increasing Chinese presence coupled with the lack of local benefits is contributing to rising anti-Chinese sentiment in Kyauk Phyu. Complaints about the impacts of the Shwe project are on the rise and communities are starting to take a stand (see following pages).

5%

per capita energy consumption in Burma compared to neighboring Thailand and China

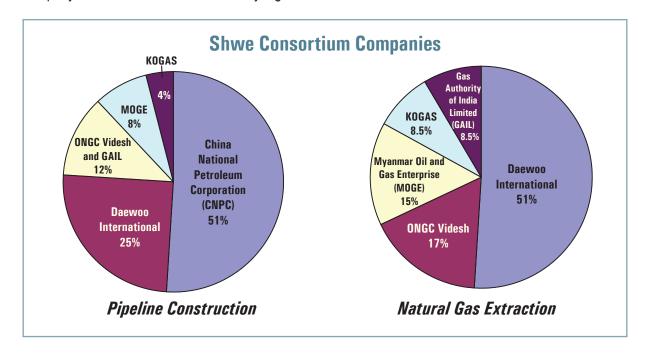


A soured reputation

There are serious reputational risks to the companies involved in the Shwe Gas and Pipeline projects due to the associated abuses, lack of benefits for local people, and the revenues the projects will create for the military regime. Increasing concerns at the international level have led to investor pullouts. In 2007, after continuous pressure from rights groups as well as the Danish government, the Danish public pension fund ATP divested over US\$12 million worth of shares in oil companies doing business with the military-run Myanmar Oil and Gas Enterprise in Burma. In 2009 another Danish pension fund, Danica Pension, announced that it had placed Daewoo International outside of the fund's "investment universe" due to the Korean company's connections to Burma's military regime.

In addition, Daewoo International has faced criminal charges for its dealings in Burma: in 2007 the company's chairman and 13 other high level Korean executives were found guilty of violating Korean trade regulations after importing US \$113 worth of equipment for an arms factory in Burma.

China's CNPC, a key company involved in the pipeline project and principle buyer of the Shwe Gas, has also experienced financial and reputational losses in the past. A campaign highlighting CNPC's provision of material support to the Sudanese government during its genocide in Darfur resulted in an investor pullout valued at US\$ 4 billion in 2007. CNPC may lose further investors and will continue to sour its reputation by pursuing these projects in Burma.









From left: Daewoo and Hyundai sign to Onshore Gas Terminal; CNPC sign at deep sea port; China Communications Corporation sign at deep sea port

WHAT PROCESS?

"We are unclear what is going to happen next. We don't know what kind of negative impacts and dangers may occur... We feel that this gas project is explosive and dangerous. As we do not have full confidence in the skills and techniques of the Chinese companies, we are concerned that the project will bring trouble...." (teacher from Kyauk Phyu)

No standards

From the complete lack of initial consultation, impact assessments, and provision of Free Prior and Informed Consent; to a lack of mechanisms to mediate community grievances related to project development; to the absence of government transparency and accountability for the revenues generated, no meaningful standards are being followed in the implementation of these projects. Local communities have been excluded from the decision-making process at all stages. Many have no idea about the project until it hits them.

No public assessments

The national laws of Myanmar, China and South Korea all make reference to the need for environmental, social and human rights impact assessments of large-scale projects. Yet to date no assessments for the Shwe Gas or Pipeline Corridor projects have been publicly disclosed, making it impossible to know what assessments have been conducted or what standards were used.

Our research has confirmed that China National Petroleum Company contracted UK-owned Hong Kong-based consulting firm ERM HK Ltd, Canadian-owned Bangkok-based consulting firm International Environmental Management, and Burma-based Myanmar Marketing Research to conduct assessments. However it is not known how these studies were conducted, what was their scope, and what they concluded. A key global best-practice for environmental impact assessments is that findings be made publicly available in the language of the people living in the project area, yet formal requests to make the studies public have gone unanswered.

Silencing those who question

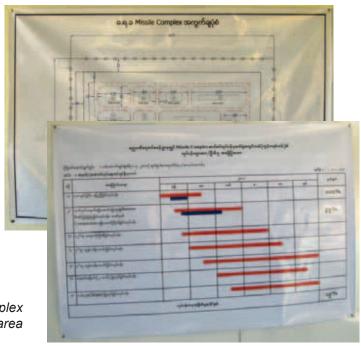
Residents in the project area are afraid to speak out in opposition to the project for fear of serious repercussions. Farmers who have lost their lands, workers complaining of exploitation, and youth trying to raise awareness about the project have been threatened, beaten and jailed for complaining or simply asking questions about the project.



Military above the law

Absolute state control of land and resources by the central government is embedded in Burma's 2008 constitution. Housing, land and property rights are non-existent and the military is able to confiscate land with impunity. There are no laws requiring environmental impact assessments or community participation in decisions surrounding large-scale projects. Even if there were such laws, according to the 2008 Constitution, the Tamatdaw, or Army, in Burma remains outside civilian law. Than Shwe, Burma's long-standing military dictator, still leads the so-called State Supreme Council.

Plans for a secret military missile complex in the Shwe project area



No revenue transparency

The sale of the Shwe gas will provide the military government with an estimated US\$29 billion in revenues over the next 30 years, yet these revenues will not likely benefit the public. The vast majority of oil and gas revenues in Burma are recorded in the national budget in the Burmese currency at the official exchange rate which is nearly 200 times lower than its actual value. There is no accountability for the whereabouts of the "leftover" revenues. The new military-backed government in Burma appears to have devised a similar "revenue black-hole" with its recently announced Special Projects Fund. Oil and gas revenues will likely enter into this unaccountable fund which is totally controlled by the Commander-in-Chief for military concerns. Tracing the revenues is made more difficult by the foreign companies involved in the Shwe project who have never practiced and have not stated plans to practice revenue transparency for payments made to Burma.

Ministry	Kyat billions	% of total
Defence	1,323	51
Construction	296	11
Education	267	10
Agriculture	199	8
Electricity	78	3
Health	73	3
Other	358	14
TOTAL	2,594	100

Myanmar Central Statistical Organisation [MCSO] 2011⁸

US \$29 billion

Revenues to Burma's military regime from sale of Shwe Gas over the next 30 years





CNPC buit a small school in the project area but children are forced to clear roads after project machines ruin the local pathways

COMMUNITIES STANDING UP



Onshore Gas Terminal workers go on strike and win concessions

On April 22, 2011 over one hundred workers employed by the Myanmar Golden Crown (MGC) company at the Onshore Gas Terminal work site held a day-long strike to demand payment of overtime wages and to protest the recent extension of their workday from 7:00-17:30 to 6:00-18:00. One worker involved in the strike said: "The workers demanded the company and its representative authorities to solve these problems or we would not work anymore."

A local activist from Gonchwein village explained the situation leading-up to the strike: "The local people were being forced work for wages lower than originally promised, and were sometimes forced to work overtime without pay. At first, a few workers complained and were quickly fired. After the firings, other workers began to quit because they were dissatisfied with the low wages and working conditions. Due to these events, progress at the construction sites was delayed, and the MGC company started putting more and more pressure on the remaining workers, resulting in this worker-led strike."

The company eventually agreed to reverse the extension of the workday and all workers returned to work the next day. "Although it was a small

Students at Sittwe University protested the high price of bus fares on August 1 this year. An increase in petrol prices led to unprecedented protests in the "Saffron Revolution" of 2007.

event, it was one of the victories for our workers" said a labor activist from Kyauk Phyu Township.

Women demand electricity in Sittwe

After one month without any access to electricity, 300 women from Kondan Ward of Arakan State's capital Sittwe organized a protest march to their local Ward Administration Office in late April 2010. The demonstrators demanded the government supply them and their families with adequate electricity as a basic social service. The electricity grid in Kondan Ward was reinstated the following day, albeit for only 2-3 hours a night. Local residents consider this a victory.

Villagers to reclaim land confiscated and sold to Daewoo

Villagers in Gonchwein are planning to reclaim public lands that were confiscated by Maung Oo, the former Arakan State (Army) Commander and current regional leader of the military-backed political party. After seizing the land, Maung Oo transferred it to his wife, who later sold it to Daewoo for 45 million kyat, angering people across Kyauk Phyu township. The affected farmers are working with lawyers to get back their land in order to officially form an agricultural cooperative under President Thein Sein's poverty alleviation program. The coconut plantation on the land was previously commonly owned.



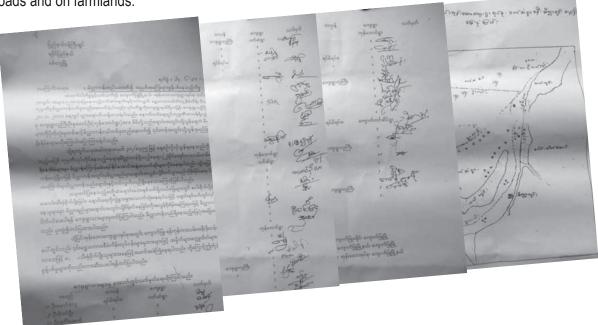
Maung Oo confiscated land and sold it to Daewoo

Kyauk Phyu residents submit public complaints about waste disposal

A group of residents from Wat San village in Kyauk Phyu angry about environmentally destructive waste disposal by companies working on the Shwe Gas Project have organized and submitted complaints to local authorities and company representatives. A letter was addressed to the Arakan State Prime Minister and district, township, and village authorities in June 2011 complaining about toilet waste being dumped into a local creek by the Petroleum Services Consultancy Company. The creek is used for irrigating crop lands and watering local livestock. The letter also mentions garbage dumped along roads and on farmlands.



Project wastes dumped in local creek (above) and community letter complaining about wastes (below)



Local communities affected by oil and gas infrastructure on western coast

Project site	Affected villages	Population
Oil terminal and deep sea port	Pyin, Ywama, Kyaunktan (3 new villages of migrants)	3,000
Onshore gas refinery and terminal complex	Liekkhamaw tract: Marakyaun, Liekkhamaw- old/new, Pyin Chay, Ma Won, Pyin Gree, Naung Taung and Gawduu	2,750
Onshore gas refinery and terminal complex	Gonchwein tract: Saybokekay, Gonchwein (west and east), Innginar, Ladarpyin, Ashitphat	2,250





VISION

Under the current military government, the project is being implemented without any meaningful standards and without a rule of law, ensuring that people in Burma will not benefit from the gas itself or the revenues from its sale and the military continues to stay in power. Yet the natural gas found in the Shwe fields is a massive resource that could potentially spur economic development and social improvement.

Protection of rights

First, a constitution that guarantees the protection of community rights and a society with a functioning rule of law is needed to allow basic investment standards to be met. These include the free, prior and informed consent of affected peoples, impact assessments, and proper grievance procedures. Large scale natural resource extraction projects should be carried only when they are free from human rights abuses such as forced labor and killings and without causing undue harm to the environment.

Local resources for local people: decentralized management

Under the 2008 Constitution, state governments have extremely limited powers compared to the central government. In a genuine federal system, state governments and local entities have a larger role in the management of local resource distribution and in managing how revenues from the sale of local resources should be spent. This decentralized management would likely lead to benefit sharing that prioritizes local needs.

A driver for the economy

Currently the International Energy Agency ranks Burma fourth worst in the world in its 'Energy Development Index', an "indicator that tracks progress in a country's or region's transition to the use of modern fuels." Better management and policy-making regarding energy consumption in Burma could help to modernize Burma and contribute to better economic development.

Electrification and cooking gas

Currently only 13% of Burma's population has access to electricity. Although not renewable, the natural gas from the Shwe fields, if used in Burma, could electrify 100% of households in the country. Currently in Burma approximately 60% of household energy consumption comes from burning biomass (wood, charcoal and other organic material), which causes air pollution, respiratory illness, deforestation and carbon dioxide emissions. Low-pressure cooking gas is more energy efficient and less polluting. If local communities could access domestic natural gas for cooking fuel, energy sources would be more secure and affordable, and burning of biomass would reduce dramatically.

Clean energy instead of dirty coal

Despite the energy efficiency and pollution mitigation benefits of developing natural gas electricity generation, Burma's regime is exporting the Shwe natural gas and instead developing a dirty coal industry. There are currently 16 major coal deposits in Burma and six coal-fired power plants are either under construction or operational. There are no standards for emissions controls, or any governmental agency with the mandate or capacity to keep emissions and waste disposal from this industry in check.

Gas sales for public benefit instead of lining pockets

Currently, the vast majority of oil and gas revenues in Burma is not in the public budget and is under military control. Burma should establish mechanisms to provide transparency and long-term planning in the expenditure of natural resource revenues, prioritizing funding of health and education sectors.

Following international standards

All investors in Burma should adopt and implement international standards and treaties such as the Equator Principles and the Extractive Industry Transparency Initiative. These will provide mechanisms to keep investors and the government more accountable to affected peoples. When implemented properly, such standards can also ensure that affected peoples are informed of and can participate in development decisions.

Revenue for social development

Azerbaijan is a leading example of a country using its natural gas to benefit local populations and spur wider economic development successes. As of 2007 the country's own reserves completely provide for its domestic gas needs and in 1997 the government established a State Oil Fund to ensure that oil and gas revenues would be used to develop the country. The Fund allocates revenues to social and economic development initiatives such as scholarships and alternative energy research; it also transfers money into the state budget in case of deficits.

"The military government is selling all the gas to China and local people are getting no benefits – the Shwe project must be stopped now!" – U Aye Tha Aung, Secretary of the Committee Representing People's Parliament and Secretary of the Arakan League for Democracy

Genuine development can only be achieved when community rights and the environment are protected, affected peoples share in benefits, and transparency and accountability mechanisms are in place. The Shwe Gas and China-Burma Pipelines projects must be suspended and all financing frozen or divested until such conditions exist.

endnotes

- ¹ "Arakan government prioritizes USDP members in Arakan's fishing block auction," Narinjara News, May 28, 2011.
- ² Bosson, Andrew. Annexes to "Forced Migration/Internal Displacement in Burma, with an Emphasis on Government-controlled areas," May 2007 available at: http://www.internaldisplacement.org/8025708F004CE90B/(http://www.internaldisplacements.)/942C84C75F965D24C12572D6002FF41D/\$file/Burma_annex_documents_mai07.pdf
- ³ See for example "Crimes in Burma" International Human Rights Clinic at Harvard Law School; May 2009. http://www.law.harvard.edu/programs/hrp/documents/Crimes-in-Burma.pdf, "Shattering Silences" Karen Women's Organization; 2004. http://www.ibiblio.org/obl/docs/Shattering_Silences.htm and "Total Impact: The Human Rights, Environmental, and Financial Impacts of Total and Chevron's Yadana Gas Project in Military-Ruled Burma (Myanmar)" EarthRights International; 2009. http://www.earthrights.org/sites/default/files/publications/total-impact.pdf
- ⁴ EarthRights International. 2011. "The Burma-China Pipelines: Human Rights Violations, Applicable Law, and Revenue Secrecy" Page 8.
- ⁵ "Total Impact: The Human Rights, Environmental, and Financial Impacts of Total and Chevron's Yadana Gas Project in Military-Ruled Burma (Myanmar)," EarthRights International; 2009. http://www.earthrights.org/sites/default/files/publications/total-impact.pdf
- ⁶ "Prostitution, an Open Trade in Kyaukpru," Narinjara News, April 5, 2011.
- ⁷ Blocking Freedom, Arakan Oil Watch, 2008.
- ⁸ Least Free: The Economic Consequences of Fifty Years of Totalitarian Rule in Burma, Sean Turnell, 2011.
- ⁹ "Addressing the Electricity Access Gap Background Paper for the World Bank Group Energy Sector Strategy," The World Bank, June 2010.



Following recent military-rigged elections in Burma, the pace of foreign investments, particularly in the natural resource sector, is increasing. Burma's military government is allowing China to build pipelines across the country which will drain Burma of its massive natural gas reserves, dashing hopes of economic development. Building the pipelines and extracting the gas are fuelling further conflicts and abuses: battles between armed groups and the government have broken out near the pipeline route and land confiscation and forced labor has started in project areas. Despite great risks, communities are standing up and voicing their concerns and opposition.

WHAT YOU CAN DO

Raise awareness and join the Shwe Gas divestment campaign

- Help spread the word about the Shwe Gas Project and China-Burma Pipelines: raise public awareness in your country through organizing public events or writing to local media.
- Contact your pension fund to ask about its investments in Shwe Consortium companies; voice concerns about the investments; start a divestment campaign among your co-workers and union members.
- Join a public event or divestment campaign organized by a "friends of Burma" group in your country. Contact us for more information on which major pension funds hold investments in Shwe Consortium companies, and how to contact your local "friends of Burma" group.

Check our website for up to date actions and events

The Shwe Gas Movement has coordinated Global Days of Action to voice concerns about the project at embassies and company offices across the world. Check our website for plans and updates on such events.

