

# ***Danger zone***

## **Giant Chinese industrial zone threatens Burma's Arakan coast**

China's plans to build a giant industrial zone at the terminal of its Shwe gas and oil pipelines on the Arakan coast will damage the livelihoods of tens of thousands of islanders and spell doom for Burma's second largest mangrove forest.

The 120 sq km "Kyauk Phyu Special Economic Zone" (SEZ) will be managed by Chinese state-owned CITIC group on Ramree island, where China is constructing a deep sea port for ships bringing oil from the Middle East and Africa. An 800-km railway is also being built from Kyauk Phyu to Yunnan, under a 50 year BOT (Build-Operate-Transfer) agreement, forging a Chinese-managed trade corridor from the Indian Ocean across Burma. Investment in the railway and SEZ, China's largest in Southeast Asia, is estimated at US \$109 billion over 35 years.

Construction of the pipelines and deep-sea port has already caused large-scale land confiscation. Now 40 villages could face direct eviction from the SEZ, while many more fear the impacts of toxic waste and pollution from planned petrochemical and metal industries. No information has been provided to local residents about the projects.

It is urgently needed to have stringent regulations in place to protect the people and environment before projects such as these are implemented in Burma.

# Rural islanders of Kyauk Phyu under threat

Kyauk Phyu Special Economic Zone is located on Kyauk Phyu Township of Burma's Arakan State. Over 200,000 people live in the township.

Farming and fishing are the main livelihoods in this quiet and rural area, which has numerous tidal channels and creeks. However, in the last few years the Shwe gas and oil pipelines project has disrupted local communities, with confiscation of farm lands and loss of fishing areas leading to migration from the area.





## The Kyauk Phyu Special Economic Zone

In December 2009 and February 2011, China and Burma signed Memoranda of Understanding (MoUs) for the construction of the Kyauk Phyu Economic and Technological Development Zone.

Under the MoU with Burma's Ministry of Planning and Economic Development, CITIC Group will construct a Special Economic Zone, including expansion of a deep sea port, railway, airport and industrial areas. Its subsidiary CITIC Construction Company Limited has made further agreements to cooperate on this project with the Htoo Company, owned by military crony Tay Za.

According to a feasibility study<sup>1</sup> by CITIC Construction Company, the zone will require an initial investment of US\$ 8.3 billion and a total US\$ 89.2 billion over 35 years, using 120 Km<sup>2</sup> (30,000 acres) of land as well as 70 Km<sup>2</sup> of waterways.

### City Cluster (28 km<sup>2</sup>)

- 2,000 MW power plant (unspecified fuel source),
- Industrial water and sewage plants
- Residential areas, business centres, hospitals, schools and tourist areas.

### Logistics Cluster (24 km<sup>2</sup>)

- Airport expansion
- 250 million-ton capacity wharf to accommodate 300,000-ton freighters.
- Sea port
- Railway and logistics park to store 10 million tons of goods.

### Industrial Cluster (40 km<sup>2</sup>)

#### ● Oil refinery and petrochemical industries (12 km<sup>2</sup>)

- Refined oil, 10 million tons/year
- Ethylene, 800,000 tons/year
- Other petrochemical products, 1.5 million tons/year
- Fertilizer, LNG etc, 3 million tons/year

#### ● Metal Industries (14 km<sup>2</sup>)

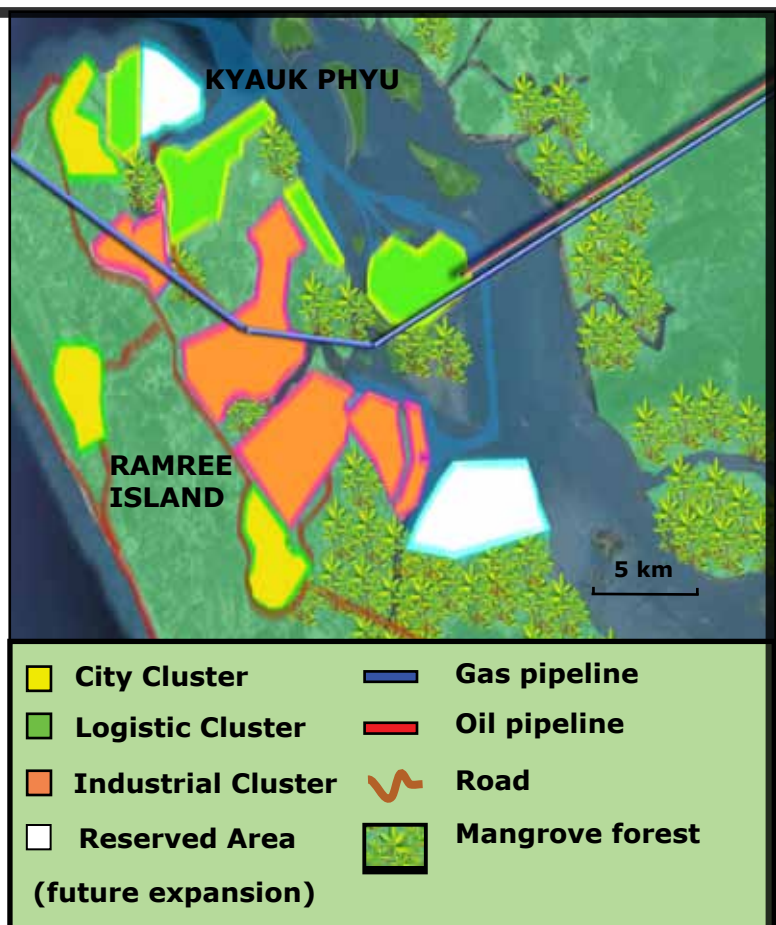
- Iron and steel, 5 million tons/year
- Other refined metals, 300,000 tons/year

#### ● Marine Service Industry (3 km<sup>2</sup>)

- Two marine docks to service regional shipping traffic and dismantle old ships for sale of materials.

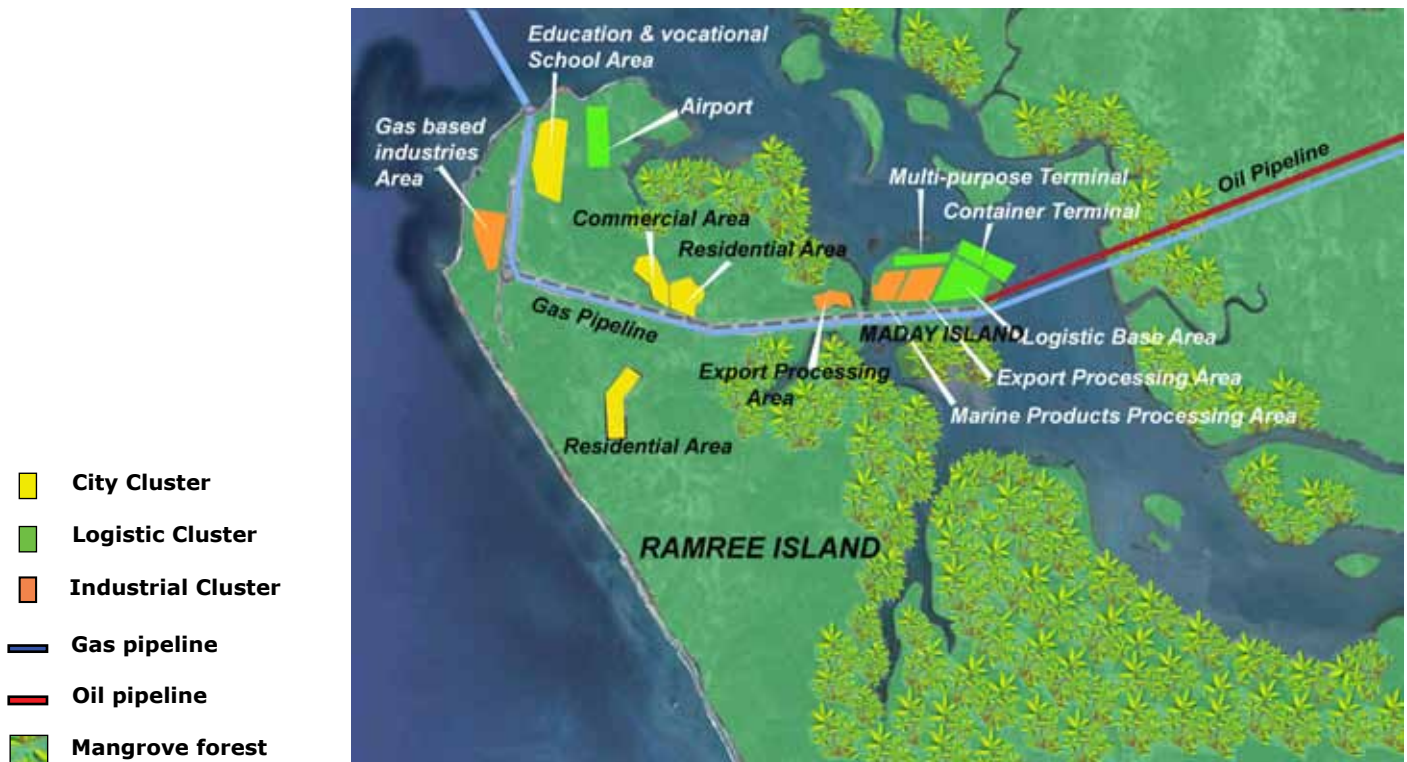
#### ● Processing and manufacturing industries (11 km<sup>2</sup>)

- Agricultural and aquatic products, gems and wood.
- Textiles, metal, plastics, car parts and electrical appliances.



## Japanese Engineering Company Involvement

In October 2012, plans for the Special Economic Zone involving the Japanese engineering company Nippon Koei Co., Ltd. were presented by the Burma's Deputy minister of Labour Myint Thein at a meeting in Yangon. The focus of the plan is agro industrial and residential areas. Communities, civil society or political parties from the affected area have yet to be informed how or if the Nippon Koei plan (map below) relates to the original CITIC Group plan (on the previous page) and who has funded the study.<sup>2</sup>



## China-Kyauk Phyu Railway and Highway

The project includes an 800 km railway to connect Kyauk Phyu to Ruili in China's southern Yunnan province. The MoU was signed in April 2011 between Myanmar's Rail Transportation Ministry and China's Railways Engineering Corporation. The railway will run through the cities Ann, Minbu, Magway, Mandalay, Lashio and Muse. The US\$ 20 billion project was originally set for completion in 2015.<sup>3</sup>

The MoU is based on a 50-year BOT (Build-Operate-Transfer) agreement, under which the China will fund and construct the railway and operate it for half a century before handing it over to the Burma authorities. Revenues and control over allocation of jobs will be in the hands of Chinese entities during this period.

High-speed trains carrying up to 4,000 tons of goods will run at speeds of up to 170 km per hour. There are also plans to construct a highway between Kyauk Phyu and Ruili in China, with an MoU between the two countries signed in 2010. However, there is no further information available about the exact route.



## Why does China want the Kyauk Phyu Special Economic Zone?

In 2006, China's president Hu Jintao outlined a new "going global" strategy, which included an increase in the number of Chinese Special Economic Zones globally. The main stated reasons were to find new markets for Chinese goods and services, build up Chinese brand names and increase China's foreign investments.

A Free Trade Agreement between China and the ASEAN nations signed in 2010 created further incentives for trade between the nations. The Kyauk Phyu project will be China's largest SEZ project in Southeast Asia and according to the feasibility study, the ASEAN market will be targeted through "export-oriented" manufacturing and processing industries.



*Construction of China's seaport at Madaya Island, Kyauk Phyu Township.*

The Kyauk Phyu Special Economic Zone will be connected to Yunnan through the rail link, the highway and the Shwe gas and oil pipelines corridor, providing China with strategic access to the Indian Ocean. By facilitating transport of natural resources and goods through Burma, China will save a 1,200 km detour through the Straits of Malacca, or one week shipping time. The SEZ is proposed to refine natural resources such as petrochemicals and iron, some of which will be further processed in new manufacturing industries including plastics, car parts and electronics.

### Who is CITIC Group?



CITIC Group is one of the largest multinational conglomerates in China, founded in 1979. In fiscal year 2009 it had annual revenues of over US\$ 22 billion and ranked within the Fortune 500 largest corporations in the world. CITIC operates mainly in financial services, properties investment, project contracting, energy, infrastructure, transportation and machinery manufacturing. CITIC Construction Company is one of the 44 wholly owned subsidiaries of CITIC Group operating in Africa, South America, the Middle East and Central Asia.<sup>4</sup>

### Who is Nippon Koei Co., Ltd?



Nippon Koei Co., Ltd. is a Japanese engineering consultant company focussing on energy and infrastructure projects. The company has conducted a series of feasibility studies in Burma since 1981 on controversial projects such as Tasang, Yeywa and Tenasserim dams and other projects.

### Who is Htoo Trading?



Htoo Trading Company is a subsidiary of the Htoo Group of Companies (HGC), a Burmese holding company. Its CEO and managing director is Tay Za, who has close links with former junta leader Than Shwe and Thura Shwe Mann, speaker of Burma's lower house. Htoo Trading Company was involved in construction of Naypyidaw as well as other projects in agriculture, transportation, shipping, mining, hotels and tourism. Aung Thet Mann, son of Thura Shwe Mann, is a director of Htoo Trading Company and on the board of HGC.



# Devastation of Livelihoods

The construction of the Special Economic Zone will multiply the already unfolding impacts of the Burma-China oil and gas pipelines. Massive industrialization will have devastating consequences for tens of thousands of farmers and fishermen who have been neither informed nor consulted about the plans.

## Land confiscation and relocation of villages

According to project maps, the 120 km<sup>2</sup> zone could lead to the relocation of about 40 villages as well as parts of Kyauk Phyu town. This, in addition to the loss of large areas of farmlands, will directly affect tens of thousands of people. None of these communities nor local government officials have been informed or consulted about the project. Construction of the Shwe pipelines and associated infrastructure has already led to the confiscation of thousands of acres of valuable farmlands. Most of these confiscations were involuntary.



A farmer from Maday Island said, *"I at first refused to sign the agreement paper for confiscation of my farm land. However police threatened to arrest me immediately in front of officials from MOGE and CNPC if I didn't sign the agreement paper. So I had to sign it as there was no choice."* (Arakan Oil Watch interview, May, 2010)

A 60-year-old woman who lost her rice fields in Radana village said, *"I have received 600,000 kyats (US \$ 700) as half of the compensation for my land. I don't know when the other half will come. I only got compensation for one third of my land taken by the company. Compensation for the other parts were taken by corrupt officials by naming other people as co-land owners."* (Arakan Oil Watch interview-May 2012)



Another villager said, *"The compensation did not equal the real value of the land. We can't buy another plot of land with that money. No one wants to lose their land. What they did to us is sinking our life. We made our living with this land and now we don't know how to continue our life anymore."* (Arakan Oil Watch interview, May, 2012)

## Impact on fisheries

The construction of wharfs and coastland industries for the zone will directly impact a minimum of 70 Km<sup>2</sup> of coastal waterways. The frequent traffic of up to 300,000-ton freighters and deep sea fishing in the corridor leading into the deep sea port will likely destroy the local small-scale fishing industries. Toxic wastes and pollution from shipping and industries will threaten fish stocks and the local ecology. Exploration of the Shwe gas fields and construction of an undersea pipeline, which involved dynamiting coral reefs, have already depleted fish populations and restricted access to fishing grounds for local fisherfolk.

A fisherman from Maday island said, *"Since they started building the seaport, I haven't been able to fish freely like before. Before the project, I could make 100 to 200,000 kyat (US\$ 120-240) profit and sometimes I even made 500,000 kyat (US\$ 600) in one fishing trip. Now, I can barely make money to cover the fuel cost, and can't make a living any more."* (Arakan Oil Watch interview, June 2012)



## Jobs for whom?

CITIC's feasibility study claims that the SEZ will bring over 100,000 new jobs to the area in the first phase. However, the skill levels required for the industries in the zone and the hiring patterns of Chinese companies globally will mean that most of the labour pool is likely to come from outside Kyauk Phyu. The construction of China's oil and gas pipelines already illustrates this: local people were able to obtain only low wage and temporary work clearing land and constructing roads while skilled jobs were given to workers from China, India and central Burma. In addition, due to the loss of farmlands, many villagers were forced to migrate to work in neighboring countries.

A local farmer who has lost his farm land to oil and gas project said, *"They don't prioritize us for jobs even though we have nothing left to work on. Outsiders are offered jobs rather than local villagers here. Workers can only get 1,500 kyat (US\$ 1.8) per day. It can't buy enough food for the family. It is difficult to accept that they are constructing buildings in our lands but we can't get a proper job to earn a living."* (Arakan Oil Watch Interview, May 2012)

## Exacerbating water scarcity

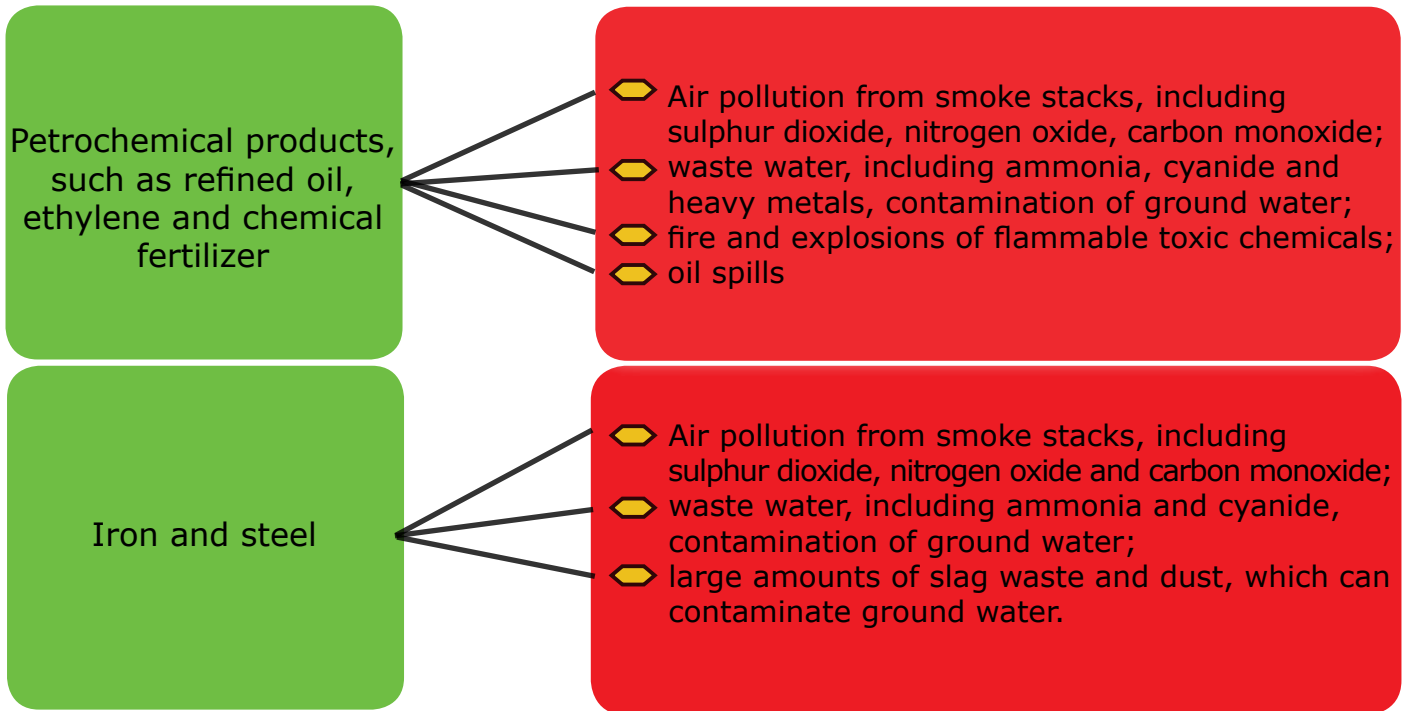
Communities in Kyuk Phyu face chronic water shortages at the end of every dry season. This particularly impacts women as they are the traditional gatherers of water.

Industrial complexes such as those planned in Kyauk Phyu use huge amounts of water. It is estimated that the SEZ would use approximately 3.6 million cubic metres of fresh water per day, or 1,314 million cubic metres per year.<sup>5</sup> This would affect the surrounding farmlands and put critical strain on the daily lives of local communities.



## Toxic petrochemical and metal industries

CITIC Group's feasibility study provides no detailed information about planned processing stages in the production of petroleum products, ethylene, and related petrochemical products as well as production of iron and steel. Despite the threat of toxic waste, pollution and accidents, neither CITIC nor the government has conducted any impact assessments.



In July 2010, explosions at oil pipelines at Dalian Xingang Oil port in China caused an oil spill that spread over 430 km<sup>2</sup> within a week.<sup>6</sup> The facilities were managed by the China National Petroleum Corporation (CNPC), which also manages the Kyauk Phyu China port pipelines. Chinese government officials reported that 1,500 tons of crude oil spilled into the sea, but no assessment on the impact of the spill on fish and sea birds was ever carried out.



# Lessons From Other Industrial Zones

## Map Ta Phut - Thailand

The Kyauk Phyu Special Economic Zone will be five times larger than the controversial Map Ta Phut Industrial Estate in Thailand's eastern province of Rayong. Built in 1988, Map Ta Phut includes a deep sea port and the largest centre of petrochemical industries in Thailand.

Environmental organizations and local communities have fought to close down the factories due to extremely high cancer-related deaths - 2,000 since 1990 - serious pollution of shallow well water, water shortages and air pollution.



Numerous accidents have taken place in Map Ta Phut over the last decades, most recently in May 2012 when explosions and a fire broke out in a petrochemical factory, killing 12 and injuring 129 people. The next day a chemical leakage in another nearby factory hospitalized 138 workers.

Due to public pressure, petrochemical industries cannot further expand in Thailand, which has led to relocating these harmful industries to Burma through the development of the Dawei Special Economic Zone.

***"Some industries are not suitable to be located in Thailand...  
This is why they decided to set up there."***

Former Thai Prime Minister Abhisit Vejjajiva,  
referring to Thai investments in Dawei

## Mangrove Forest Under Threat

The zone threatens to devastate Burma's second largest mangrove forest, which lines the coastal areas of Kyauk Phyu and neighbouring Ramree Township. The mangroves provide a crucial habitat for a large number of marine species as well as protection from natural disasters such as cyclones and tsunamis. There is a high risk that toxic waste from petrochemical and other industries will cause irreparable damage to the sensitive mangrove ecosystem.



## Dawei - Burma

Influenced by the growth of economic zones in China, Burma's former junta leader General Than Shwe finalized plans for Special Economic Zones in Kyauk Phyu, Thilawa and Dawei before handing over the administration to a new government.

Construction of the Dawei SEZ in southeastern Burma has advanced the furthest. Over 30,000 people will be forced off their lands to make way for the 250 km<sup>2</sup> zone, and more lands will be lost to make way for a six-lane highway into Thailand.

In response to the forced evictions and plans for the high polluting industries, affected communities have voiced their concerns through public protests and a series of letters to local and central government. However, local authorities have been powerless to resist the interests of the central government and foreign investors.

In January 2012, in response to the communities' protests, Thein Sein downsized a planned 4,000 MW coal-fired power plant to 400 MW, but other protests continue against the construction of an oil refinery and the confiscation of land to make way for roads and water reservoirs.

## Da Xie - China

Industrial zones in China are causing high levels of pollution, posing risks to the environment and surrounding communities, stated a report by the China Environment Federation.<sup>7</sup> These negative impacts are increasingly causing public protests by affected people.

In 1994 the CITIC Group developed the Da Xie Special Economic Zone, including port facilities as well as petro chemical industries similar to those planned in Kyauk Phyu. The controversial project caused damage to the environment and livelihoods of surrounding communities. A major issue was that the Da Xie industries required much more water than originally planned, leading to serious local water shortages.

In 2005, nearby villagers staged a protest outside the SEZ in response to flooding of the surrounding areas, and blamed the companies for poor drainage systems. A year later, over 100 kg of liquid chlorine leaked into the surrounding farmland and communities, destroying crops up to a kilometer away. Within five days of the accident, 678 villagers from the surrounding area had visited hospital reporting dizziness, coughing and skin irritations as a result of the leakage.

Complaints were also made that the Da Xie SEZ management had withheld information about the leakage and continued production for three days as if nothing had happened. Following an investigation in 2007, an Environmental Impact Tracking Evaluation report stated risks further chemical leakage and oil spills had still not been mitigated.<sup>8</sup>



*In September 2011, Chinese authorities ordered a petro-chemical plant in Dalian to shut down immediately after tens of thousands of protesters marched through the streets of a nearby city, demanding the factory be relocated.*

# No adequate standards or mechanisms

CITIC claims in its feasibility study that it will follow the laws and standards of Burma, including its environmental laws. However, an environmental law passed by Burma's parliament in March 2012 lacks many crucial provisions for protection of people and the environment, including specific standards for how Environmental and Social Impact Assessments should be carried out. It also does not include any mechanisms for public disclosure, Health or Human Rights Impact Assessments, Strategic Environmental Assessments or clear waste management procedures.

Moreover, Burma does not have laws that force government or foreign investors to publicly disclose contractual details of development plans, nor does it have adequate mechanisms to ensure that revenues are managed accountably and transparently. This would fuel corrupt practices.

## Important provisions for community protection

### **Free Prior and Informed Consent (FPIC):**

Before any development project commences, affected communities must be given full information about project plans and impacts on their lives. They can then analyze and discuss, without coercion, whether to give consent to the project, and to demand any necessary changes or conditions to the plan. FPIC has been adopted by the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) as well as the International Finance Corporation (IFC).

### **Strategic Environmental Assessment (SEA):**

This is a comprehensive strategic environmental assessment which can include economic and social issues. It links to national policies, examines alternatives and stresses sustainability. It should precede an EIA.

### **Environmental, Social, Health and Human Rights Impact Assessments (EIA, SIA, HIA and HRIA):**

These are separate assessments analyzing different impacts of a planned project. These assessments should be completed and disclosed to affected communities for input before projects are approved, in order to prevent or minimize any negative impacts.

## Endnotes

- 1 CITIC Group, *Myanmar Kyauk Phyu Port Industrial Zone Preliminary Feasibility Study*, May 2011
- 2 Nippon Koei Co.,Ltd, *Kyauk Phyu SEZ Development concept*, March, 2012.
- 3 *The Nation*, August 29, 2011, [www.nationmultimedia.com/home/Construction-of-China-Burma-railway-could-start-in-30163951.html](http://www.nationmultimedia.com/home/Construction-of-China-Burma-railway-could-start-in-30163951.html)
- 4 *Fortune Global 500*, July, 2012, [www.money.cnn.com/magazines/fortune/global500/2012/snapshots/10772.html](http://www.money.cnn.com/magazines/fortune/global500/2012/snapshots/10772.html)
- 5 *Health Impact Assessment and Trans-border Investment*, Healthy Public Policy Foundation, 2012
- 6 *Boston.com*, July 21, 2010, [www.boston.com/bigpicture/2010/07/oil\\_spill\\_in\\_dalian\\_china.html](http://www.boston.com/bigpicture/2010/07/oil_spill_in_dalian_china.html)
- 7 *The China Green News*, 1 Oct, 2011, <http://eng.greensos.cn/ShowArticle.aspx?articleId=1098>
- 8 Yu Hou/Tian-zhu Zhang, *Developing Fears*, *International Institute for Asian Affairs*, Newsletter No. 50, 2009



# Recommendations

In light of massive increased interest of foreign investors in Burma, we must prioritize sustainable and healthy development that puts the people of Burma and its environment first. Projects such as the Kyauk Phyu Special Economic Zone threaten the lives of impacted communities and the environment, setting a dangerous precedent for other similar development projects in Burma. Arakan Oil Watch therefore believes that the project should be suspended until the following recommendations have been fulfilled:

- CITIC and the government of Burma must disclose detailed project information to the public, in particular to affected communities as well as related political parties and civil society organisations.
- Affected communities must give Free Prior and Informed Consent (FPIC) before project commencement.
- Thorough Strategic Environment Assessments (SEA) as well as Environment, Social, Health and Human Rights Impact Assessments (EIA, SIA, HIA and HRIA) must be implemented and disclosed to the public before project commencement.
- Local affected people must have a choice to decide whether to give up their homes and land for agreed upon compensation, without coercion or threats.
- Protection of environment, human rights and livelihoods must follow international standards and allow independent monitoring by civil society organizations, including testing of pollution and waste in affected communities.
- There must be a plan detailing how the use of local labour will be prioritized and local personnel trained to benefit from job creation.
- Financial streams must be transparent and publicly disclosed.

