

# Impacts of Oil & Gas Projects in Burma

**Arakan Oil Watch (Burma)**



**Oil Watch Southeast Asia Regional Meeting**

**July 27 2010**

# Geography of Burma



## Arakan Map



- Area is 36,762 km<sup>2</sup>
- Estimated population is 3 million
- Capital city is Sittway

# Burma's political situation in brief

- Burma has been under military rule since 1962
- National uprising in 1988.
- National election in 1990: National League for Democracy (NLD), led by Aung San Suu Kyi, won a landslide victory with 82% of parliamentary seats
- Instead of transferring power to NLD, the military arrested and tortured many MPs.
- Saffron Revolution in 2007
- Election law announced by SPDC
- NLD not participating in 2010 election



- Pro-democracy leader Aung San Suu Kyi, 63 years old and Nobel Peace prize winner, has spent more than 12 of the past 18 years in detention.
- Over 2,100 political prisoners are still held in Burmese prisons.

# Burma is a poor country under current brutal regime

- At independence, Burma was one of Asia's richest countries. Now it is among the poorest.
- Most of the people live under **1US\$** per day.
- IDP **540,000** by war or human rights abuses.
- Estimated **155,000** people live in refugee camps along the Thai-Burma border.
- The economy is mismanaged. People cannot afford even basic needs due to chronic inflation in the hundreds of percent.
- An estimated 35% of children under 5 years old suffer from malnutrition.
- Junta and cronies are very, very rich, even though 57 million people are facing poverty.



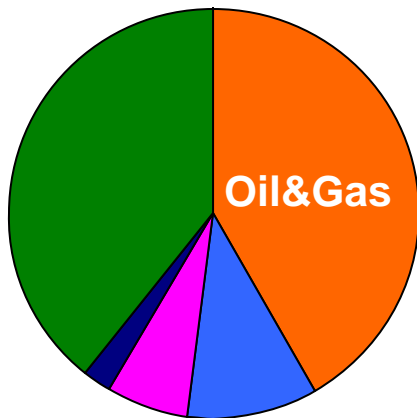
**Burma's dictator  
Than Shwe**

# Burma Crisis: Aug-Sep, 2007



# Burma is resource rich

- Oil & Gas
- Gems
- Ruby & Jade
- Timber
- Hydropower



|                  |        |
|------------------|--------|
| ■ Oil & Gas      | 43 %   |
| ■ Timber         | 10.3 % |
| ■ Gem            | 5.9 %  |
| ■ Ivanhoe Copper | 2.1 %  |
| ■ Others         | 39 %   |



# Oil and Gas: Largest source of revenue for Than Shwe's regime

- 2.16 billion US\$ from gas exports to Thailand by inland pipeline, (accounting for 43% of total exports in 2007)
- Doubled from the last year 1.08 billion US\$



# Yadana and Yetagon Gas Projects (9.7 tcf )

- Yadana offshore project
- Operated by Total, Myanmar Unocal, PTTEP, MOGE.
- Location: The Yadana project incorporates the M-5 and M-6 offshore blocks in the Mottama Gulf.
- Reserves: 6.5TCF.
- Production: The project exports 600 million cubic feet of gas per day (mmcf) to Thailand, while another 125mmcf is diverted for domestic use.
- History: MOGE discovered the Yadana gas field, which provides a large chunk of the nation's energy needs, in 1982. Gas exports from the field to Thailand, via a pipeline, started in 1998.



## **Stakeholders**

**Yadana:** Total (France)-31%, Chevron (formerly UNOCAL, USA)-28%, PTTEP (Thailand)-26% ,  
MOGE (Burmese military)-15%



# Yetagun offshore gas project

- Operated by Petronas, MOGE, PTTEP and Nippon
- Location: M-12, M-13, M-14 offshore blocks, Mottama Gulf.
- Reserves: 3.2TCF.
- Production: 400mmcfd.
- History: Discovered by Texaco (US) in 1992. Ownership changed to Premier in 1997 and then Petronas took over in 2002.

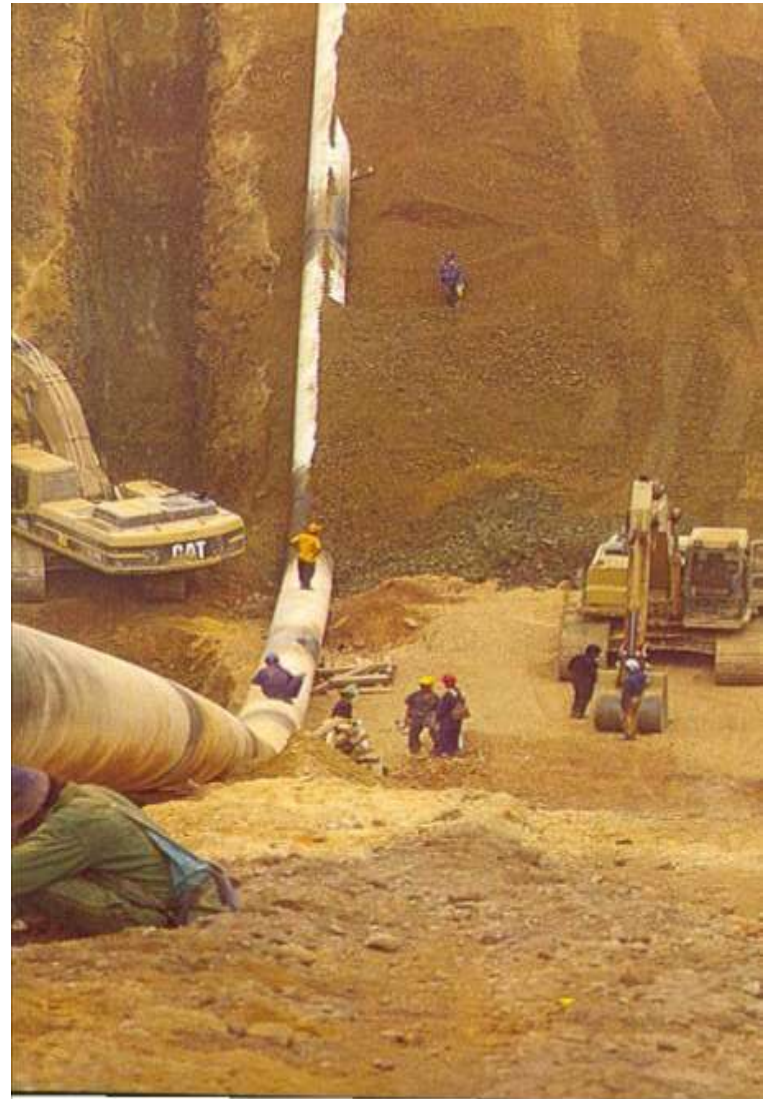
## *Stakeholders*

Yetagun: PTTEP (Thailand)19.32%, Petronas(Malaysia)-14.17%, Nippon oil exploration-14.17%, MOGE (Myanmar)-15%

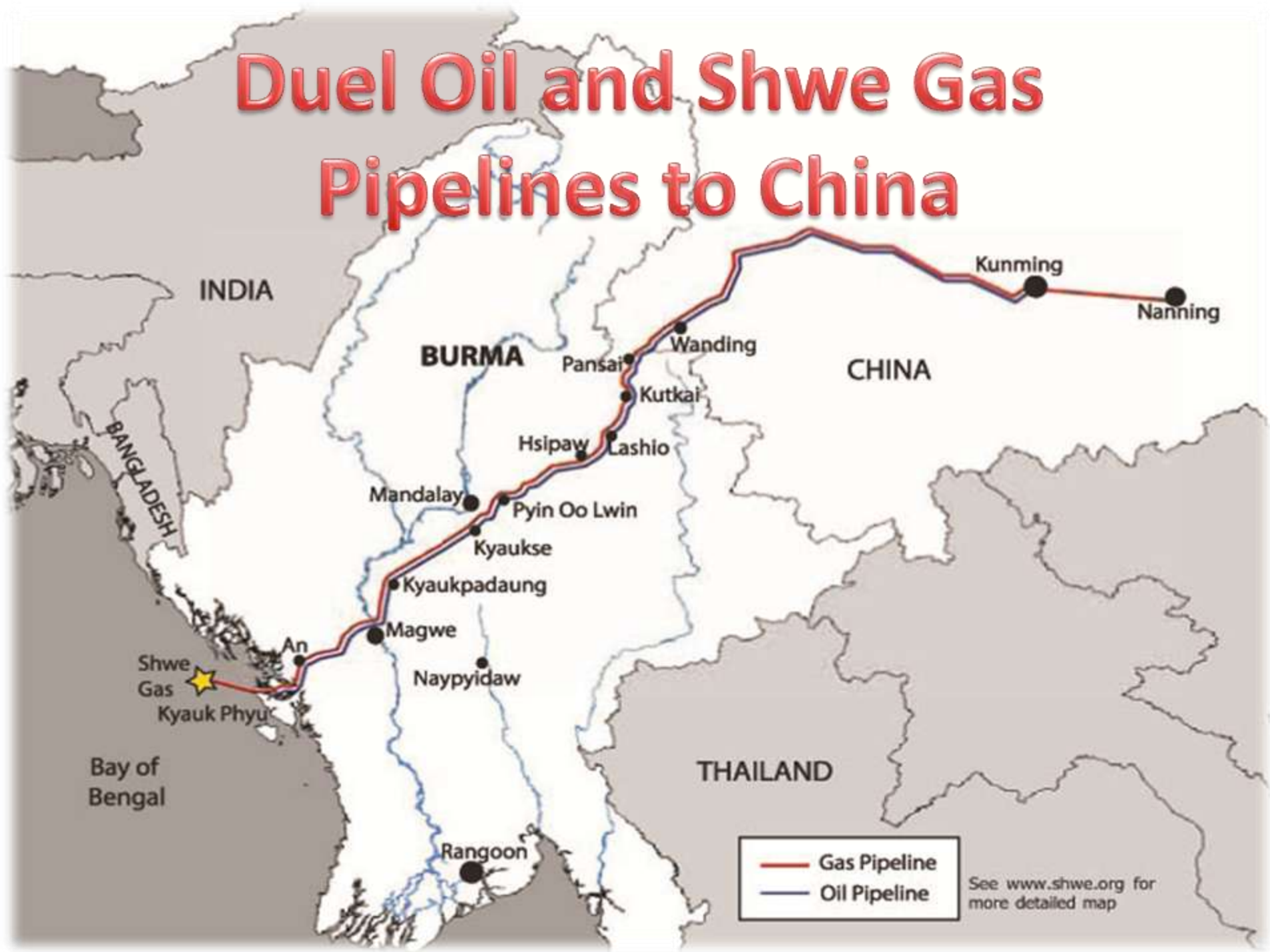
# Impacts from Thai-Burma pipeline construction

## Abuses:

- Land confiscation
- Force relocation
- Force labor
- Rape case
- Torture
- Law sue the companies



# Duel Oil and Shwe Gas Pipelines to China

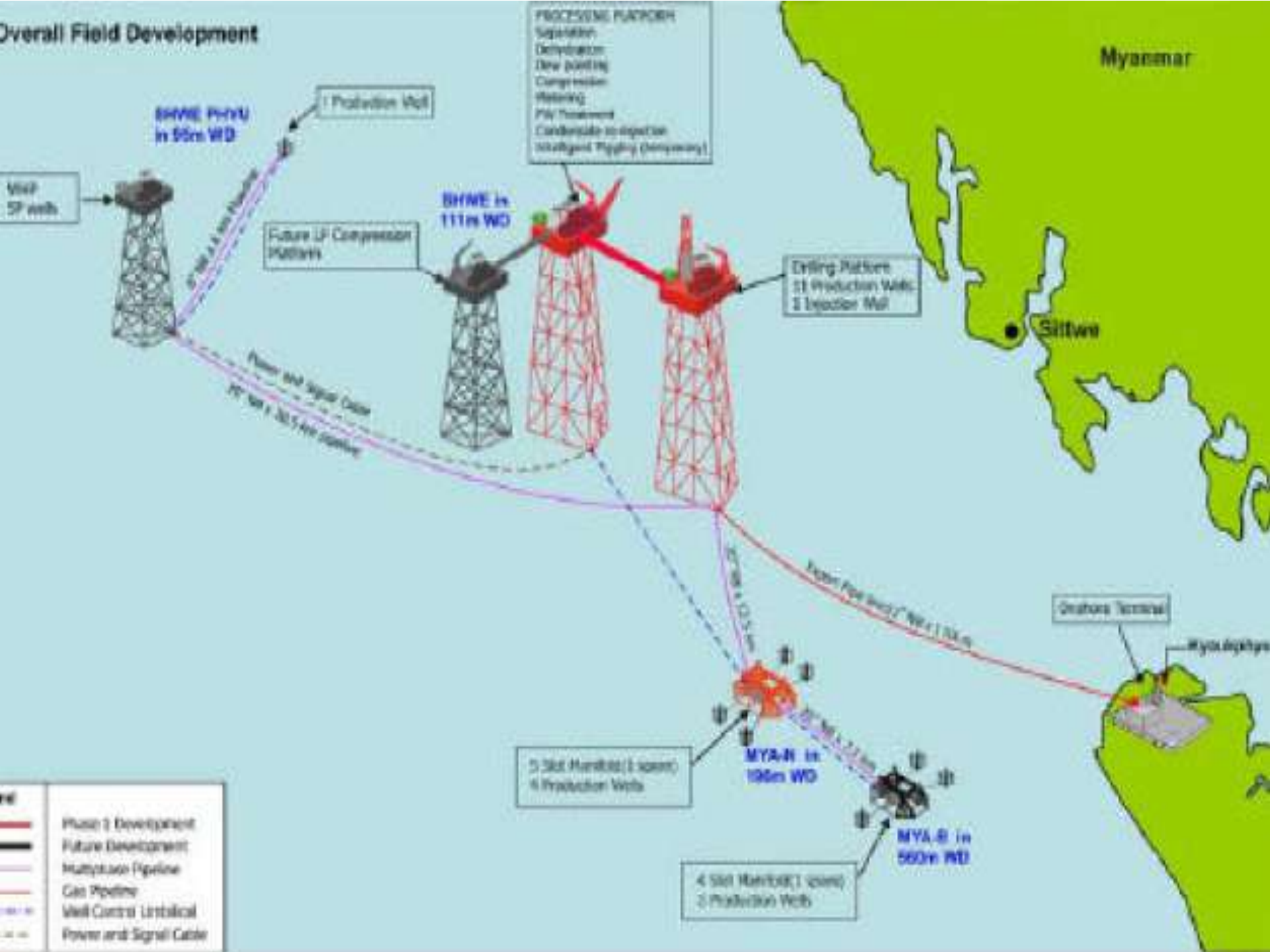


# Duel Oil and Shwe Gas pipelines has started since 2009

- Oil and Gas pipeline construction start late 2009 and will complete in 2013
- Abuses start since beginning of pipelines construction
- Oil and Gas pipeline threaten human rights and Env abuses



# Overall Field Development



PROCESSING PLATFORM  
 Separator  
 Dehydration  
 New blending  
 Compression  
 Heating  
 Pig Treatment  
 Condensate Injection  
 Intelligent Pigging (Intelligent)

Drilling Platform  
 2 Production Wells  
 1 Injector Well

3 Slot Manifold (1 count)  
 4 Production Wells

4 Slot Manifold (1 count)  
 2 Production Wells

| Line Style   | Description            |
|--------------|------------------------|
| Solid Red    | Phase 2 Development    |
| Dashed Red   | Future Development     |
| Double Red   | Multi-Phase Pipeline   |
| Single Red   | Gas Pipeline           |
| Blue Dashed  | Well Control Umbilical |
| Black Dashed | Power and Signal Cable |

# Burma's the largest (SHWE) gas field

- Shwe Gas The A-1 and A-3 offshore fields have proven reserves of 5.7 to 10 trillion cubic feet (tcf) with up to 8.6 tcf recoverable, according to U.S.-based international certification agency GCA.
- Reserves: The fields hold confirmed reserves of up to **9.1 trillion** cubic feet (tcf) of natural gas, of which 4.5 to 7.7 tcf is recoverable.
- Production: Production from both gas fields is expected to begin in 2013.
- History: The A-1 block was discovered in January 2004, by Daewoo. The block A-3 was located in January 2006.
- **Stake holder,**
- Operator Daewoo International of S.Korea 's Daewoo, KOGAS, ONGC, Gail, MOGE
- Production are planned in 2013, CNPC is gas buyer.



Shwe Gas field

# Revenue for Military regime?

- Annual transit free: **\$ 150 million** per year for 30 years for a total of **\$ 4.5 billion**
- Estimated revenues from the sale of the natural gas: **\$ 29.2 billion**
- The sale of the Shwe Gas will provide the junta with an additional **\$ 970 million** annually. This does not include signature bonuses and other unofficial payments that would be part of the Shwe Gas

# Where is gas revenue?

|           |         |
|-----------|---------|
| Military  | 60 %    |
| Health    | 1.43%   |
| Education | 3.8 %   |
| Others    | 34.77 % |

## Nuclear weapon

**THE UFG PROJECT — INSIDE BURMA'S SECRET NUCLEAR PROGRAMME**

**URANIUM & PLUTONIUM**

Uranium mining is getting close to 10 tonnes in Burma and supplies have reportedly been sent to France and Iran for enrichment. In April 2012 it was reported nuclear grade uranium for the nuclear programme was being stored near Lashio in Shan State.

Burma has at least four uranium plants in operation in various states and one planned (UFG), a concentration of uranium mines in southern Burma. Myanmar is considered a uranium resource-rich (UFR) by definition it is possible for Myanmar to produce fuel for nuclear reactors.

Both processing plants are close to the Myanmar coast, which allows the region to also target to export fuel for reactors and other fuel use as a by-product.

**THE URANIUM MINES**

1. Kachin State (near Hpakant)
2. Thungayin (near Hpakant)
3. Hpakant (near Hpakant)
4. Thungayin (near Hpakant)
5. Kachin State (near Hpakant)
6. Kachin State (near Hpakant)
7. Kachin State (near Hpakant)
8. Kachin State (near Hpakant)
9. Kachin State (near Hpakant)
10. Kachin State (near Hpakant)

**THE REACTOR SITES**

Reactor sites are located in Hpakant and in various states in the Myanmar region. A list of 10 reactor sites is provided in the infographic.

**THE URANIUM PLANTS**

1. Thungayin (near Hpakant)
2. Thungayin (near Hpakant)

**KEY DATES**

2006: It was reported that Myanmar was planning to build a 30 MW nuclear reactor in Hpakant.

2007: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2008: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2009: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2010: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2011: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2012: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2013: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2014: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2015: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2016: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2017: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2018: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2019: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2020: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2021: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2022: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2023: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

2024: Myanmar was reported to be planning to build a 30 MW nuclear reactor in Hpakant.

Cephic: shows detail of Burma's nuclear program (Bangkok Post, 2 August)



**Under ground tunnel**



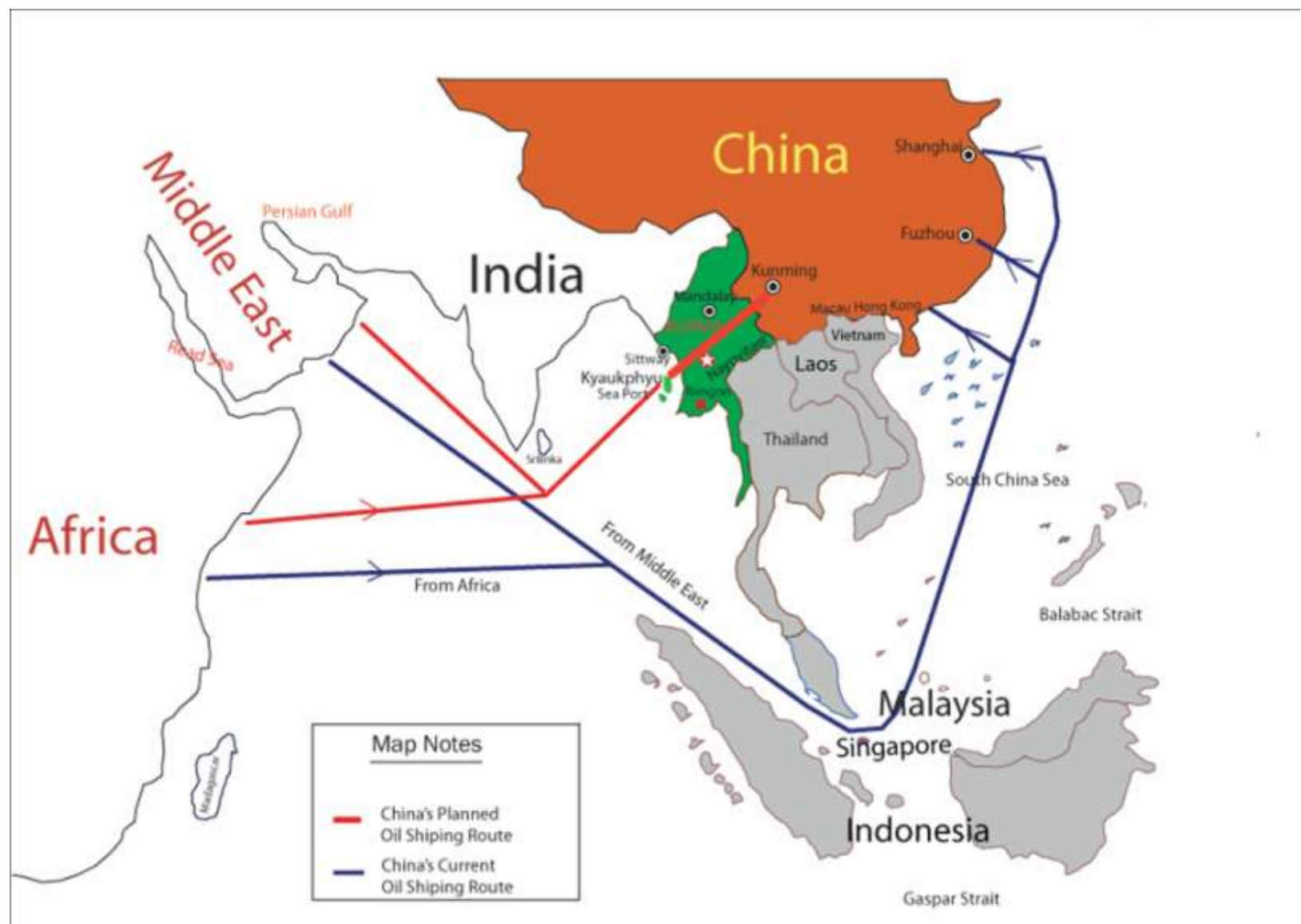
## New Capita city (Naypyitaw)





- The SPDC spends nearly 60% of its GDP on military: the number of military personnel increased from 180,000 in 1988 to over 444,000 in 2002.

# China's new Oil pipeline route



Source: Arak an Oil Watch



Ann

Tat Taung

Kyauk Phyu

Maday Kyun

Ramree



Offshore gas rig



Gas terminal



Oil terminal



Military base



Navy



Deep Sea port



Town



Mangrove forest



Oil pipe line



Gas pipe line

# Maday Island map

- 2,443 villagers from 6 villages have been suffering human rights abuses
- Over 100 Chinese employees in Maday Island
- Will set up oil terminal at Maday Island.

© 2010 Mapabc.com  
© 2010 Google  
Image © 2010 DigitalGlobe

Imagery Date: Feb 20, 2004

19°21'42.66" N 93°39'43.88" E elev 89 ft

© 2009 Google

Eye alt 14800 ft

- “ I have a big problem because I lost my farm land. I was a farmer but all my farm land had been confiscated by the Chinese company. I do have not any other job or skills except being a farmer” said a villager





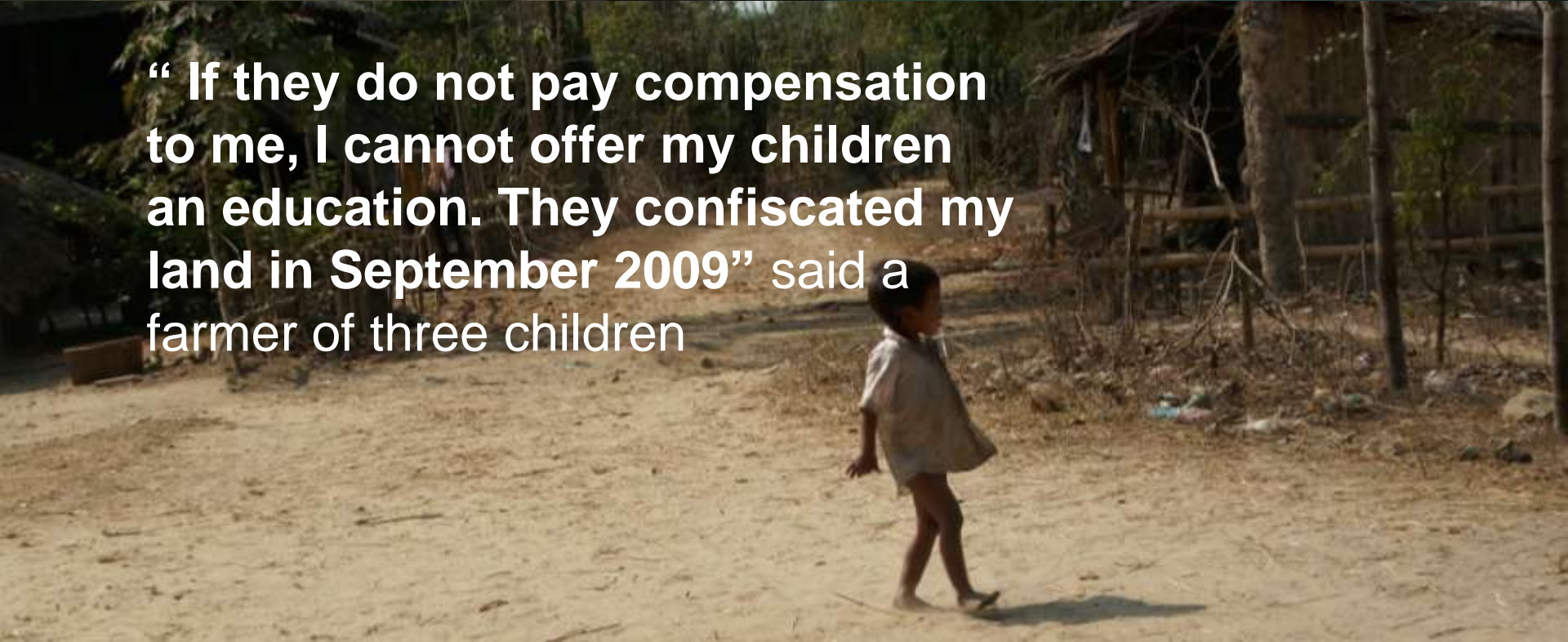




**“ they confiscated land from us and now I have no place to cultivate my plants. What are my daughters and sons going to eat if their parents cannot provide food for them?” said a villager**



**“ If they do not pay compensation to me, I cannot offer my children an education. They confiscated my land in September 2009” said a farmer of three children**



## Document paper

“ I had to sign a document in front of the police. They came to me and asked some questions after they confiscated my land because they were worried that I would create problems with the Chinese. The police warned me to not create any problems with the Chinese workers” said a villager who lost land

**FORM - 1**

Name: အောင်ကျော် NWC No: ၀၀/၀၀၀၀/၀၀၀၀၀၀၀၀ Date: 18-10-2019

| No. | Identification | Maturity | Number  | Location | Remark |
|-----|----------------|----------|---------|----------|--------|
| 1   | ၀၀၀၅           |          | ၀.၅၇၀၀၀ |          | မရှိ   |
| 2   | ၀၀၀၆           | B        | ၀၀.၀၆   |          | "      |
| 3   | ၀၀             |          | ၀.၀၅    |          | "      |
| 4   | အောင်ကျော်     |          | ၀.၀၅    |          | "      |
| 5   |                |          |         |          |        |
| 6   |                |          |         |          |        |
| 7   |                |          |         |          |        |
| 8   |                |          |         |          |        |
| 9   |                |          |         |          |        |
| 10  |                |          |         |          |        |
| 11  |                |          |         |          |        |
| 12  |                |          |         |          |        |
| 13  |                |          |         |          |        |
| 14  |                |          |         |          |        |
| 15  |                |          |         |          |        |
| 16  |                |          |         |          |        |
| 17  |                |          |         |          |        |
| 18  |                |          |         |          |        |
| 19  |                |          |         |          |        |
| 20  |                |          |         |          |        |

Recorded by: \_\_\_\_\_ Signature of owner: \_\_\_\_\_ Village Council: \_\_\_\_\_

Signature: [Signature] Signature: အောင်ကျော် Signature: \_\_\_\_\_

Name: အောင်ကျော် Name: အောင်ကျော် Name: အောင်ကျော်

## Fishing and Local Market

“ the residents will face many problems in the future, such as no free fishing in the sea and in the river. Maday Island has over 300 fishermen and they will face grave problems in the future if they cannot catch fish freely” said a fisherman



# **Destruction of Burma's mangrove forest**



# Increased militarization



# Local life at sea port area



# What we are doing:

**Provide knowledge to Local people**

A photograph showing a man in a red and white striped shirt standing and pointing at a laptop screen. He is addressing a group of people seated around a table. The room has white walls with some papers pinned to them. A small table in the background holds several water bottles and other items. The overall scene suggests a community meeting or a local training session.



# Awareness and Mobilizing

## BLOCKING FREEDOM:

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



ARAKAN OIL WATCH October 2008



**ရခိုင်သမ္မတတရားရုံးသည် ရခိုင်နိုင်ငံကို တိုင်းတော်မရသည့်အကြောင်းကြားရမည်**

သမ္မတနိုင်ငံတစ်ခုအဖြစ် ဖန်တီးနိုင်ရေးအတွက် ရခိုင်သမ္မတတရားရုံးမှ နိုင်ငံခြားနိုင်ငံများသို့ အချက်အလက်များကို တောင်းဆိုထားရာ ရခိုင်သမ္မတတရားရုံးသည် နိုဘင်ဘာ ၃၀ အရပ် အထိရောက် မီ ၁၀၀၂၅ ဖီဒီအမ် ရခိုင်နိုင်ငံခြားသို့ ငြိမ်းသော ရခိုင်သမ္မတတရားရုံးသည် အင်အားစွမ်းရည်အား ရခိုင်သမ္မတတရားရုံး တိုင်းတော်မရသည့်အကြောင်းကြားရမည် ဖြစ်သည်။ ရခိုင်သမ္မတတရားရုံးသည် အင်အားစွမ်းရည်အား ရခိုင်သမ္မတတရားရုံး တိုင်းတော်မရသည့်အကြောင်းကြားရမည် ဖြစ်သည်။ ရခိုင်သမ္မတတရားရုံးသည် အင်အားစွမ်းရည်အား ရခိုင်သမ္မတတရားရုံး တိုင်းတော်မရသည့်အကြောင်းကြားရမည် ဖြစ်သည်။

**ရခိုင်သမ္မတတရားရုံးသည် ရခိုင်နိုင်ငံကို အသက်မသွားကြပါ**

ရခိုင်သမ္မတတရားရုံးသည် ရခိုင်နိုင်ငံကို အသက်မသွားကြပါ။ ရခိုင်သမ္မတတရားရုံးသည် ရခိုင်နိုင်ငံကို အသက်မသွားကြပါ။ ရခိုင်သမ္မတတရားရုံးသည် ရခိုင်နိုင်ငံကို အသက်မသွားကြပါ။ ရခိုင်သမ္မတတရားရုံးသည် ရခိုင်နိုင်ငံကို အသက်မသွားကြပါ။



ရခိုင် သမ္မတတရားရုံး  
အသက်မသွားကြပါ  
ရခိုင်နိုင်ငံ



## The Shwe Gas Bulletin

Volume 3, Issue 9  
Dec-Jan, 09, 2010

### China Tie Economic with Burma's Military Regime Including Energy Sector

Dec 2009 (SGB)

During the visit of Chinese Vice President Xi Jinping to Burma in Dec 2009, the two countries signed five agreements on the development of trade, economy, transport infrastructure, technological cooperation and purchase of machinery; seven financial agreements, three agreements on hydroelectric power; and one agreement on the energy sector and the oil and natural gas pipelines. Among the MoUs signed during the visit was an agreement to allow China National Petroleum Corporation (CNPC) exclusive rights to build and operate a Myanmar-China Crude Oil Pipeline.

China's trade with Burma is on the rise concomitant with their deepening energy ties. According to Chinese official statistics, from January to December in 2008, bilateral trade between the two nations accounted for US\$ 2.626 billion, a rise of 26.4 percent from the corresponding period in 2007. China has become the No. 4 foreign investor in Myanmar as against its No. 6 rank in the past.

#### CNPC Starts Work on \$1.5 Billion Oil Pipeline and Oil Terminal in Autumn

Dec 2009 (SGB)

China's CNPC will start building the \$1.5 billion oil pipeline in autumn of this year and construction of the oil terminal as early as October 31 in Kyauk Phya City of Western Burma's Arakan State, according to OilVoice news.

The China-Burma Crude Oil Pipeline travels from the small island of Madaya Kyauk Phya, running 771 kilometers through Rakhine, Magway, Mandalay and Shan State, and enters into China from Ruili in Yunnan Province.

The pipeline initially will carry 12 million tons of crude oil per year and ultimately, it will be able to carry 22 million tons annually.

CNPC holds a majority 50.9% stake and state-owned Myanmar Oil & Gas Enterprise (MOGE) owns the remaining

*Continue to page -6*



Chinese Vice President Xi Jinping (left) and Burma's dictator Thant Shwe (right) during last year's visit



Signing of MoU between China and Burma during the visit

*Published by the Arakan Oil Watch, a core member of the Shwe Gas Movement*

**THANK YOU!**

