


Policy Forum 06-74A: Burma and Its Neighbours: The Geopolitics of Gas

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Åshild Kolås & Stein Tønnesson

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I. Introduction

Åshild Kolås & Stein Tønnesson of the International Peace Research Institute, Oslo (PRIO) note that offshore natural gas is now the major source of income for the Burmese military regime. A wider concern is "the current Sino-Indian rivalry over Burmese natural gas from the Shwe field", which, they suggest, "may give rise to further competition to assist the Burmese."

The views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the Nautilus Institute. Readers should note that Nautilus seeks a diversity of views and opinions on contentious topics in order to identify common ground.

II. Essay by Åshild Kolås & Stein Tønnesson

- Burma and Its Neighbours: The Geopolitics of Gas
by Åshild Kolås & Stein Tønnesson

Introduction

At present, no progress is being made in the direction of reintroducing democracy in Burma, [1] or even in preparing the ground for a government with more civilian influence. Rather, the situation within the country seems to be deteriorating, with numerous new reports of violence, forced displacement and other signs of repression. The Burmese military regime recently moved its official capital from the commercial and cultural metropolis Yangon to a more protected, newly constructed internal capital at Pynmana. Yangon was probably seen by the regime as too exposed from a security perspective.

The illegitimate and oppressive nature of the current Burmese regime has been a key concern in European and American policymaking on Burma, and has also represented a problem for Burma's fellow member-states in the Association of Southeast Asian Nations (ASEAN). Several of the ASEAN countries, as well as India and China, have sought to downplay or even ignore this problem so as not to undermine their national interests in maintaining close relations with the Burmese power-holders.

The energy-security concerns of Thailand, India and China are key factors in the relations of all three countries with Burma. In principle, India and China have pledged to cooperate in the field of energy security in order to avoid costly rivalries. In practice, however, commentators expect that the two oil-importing giants will find it more or less impossible to avoid such rivalries. In relation to Burma, this seems difficult indeed. The immediate issue is competition between India and China over gas from Shwe, a newly discovered gas field off the coast of Arakan. An underlying Indian concern is China's naval presence and intelligence-monitoring both in the Bay of Bengal and the Andaman Sea, where the Indian navy has been used to operating without interference, and in the Strait of Malacca.

For fear of losing influence with the Burmese regime, both India and Thailand have chosen a 'pragmatic' approach to the country's State Peace and Development Council (SPDC), whereas China tends to support Burma's rulers whenever they come under external pressure to undertake reforms. All three of Burma's neighbours are set to maintain a strong strategic interest in Burma, but the importance of Burma to the Chinese security agenda deserves particular attention. China relies on its bases on Burmese territory to monitor the Indian Ocean and the entrance to the Strait of Malacca, a waterway of crucial importance for the provision of oil and other necessities to China, Taiwan, South Korea and Japan. The strategic importance of the Malacca Strait has become even

greater over the last decade, with China's growing dependence on imported oil. About 80% of all oil supplies to China are currently shipped by tankers through the Malacca Strait. Military planners in China fear an embargo in the event of war or an acute crisis in their relationship with the United States. Chinese assistance to port development in Burma is linked closely to China's objective to reduce its dependence on tanker transports through the Malacca Strait and South China Sea. The current Sino-Indian rivalry over Burmese natural gas from the Shwe field may give rise to further competition to assist the Burmese regime in building deep-sea ports and maritime facilities, as well as connecting infrastructure such as roads and airstrips, and of course gas pipelines. Calls by the Burmese pro-democracy movement for a tightening of the current EU and US sanctions regimes are premised on the assumption that it would be difficult for the Burmese military regime to remain in power without foreign trade and investments. That may be so, but the likelihood that Burma could be economically isolated is currently growing ever more remote. Burma's single most valuable export commodity is natural gas, which is becoming increasingly important to Burma's neighbours and key trading partners. Thailand has already invested heavily in Burmese natural gas and is currently entering into new energy deals with the Burmese regime. China plays a key role as a trading partner. Its trade with Burma reached \$1.2 billion in 2005, of a total Burma trade of \$5 billion. [2] China will further consolidate its economic ties with Burma with the building of two new pipelines through the country, one for oil and the other for gas. India is set to become a third major partner to the Burmese regime if its new gas pipeline plans are realized. Considering the vital significance of Burmese natural gas, both as a major source of revenue for the military regime and as an important aspect of the current energy security strategies of the neighbouring states, the present report takes a comprehensive look at the geopolitics of Burmese gas. It describes the history of oil and gas exploitation in Burma, the political context and the main stakeholders involved, with a focus on the emerging rivalry between India and China over Burmese gas. In conclusion, the report outlines some basic policy implications of the analysis, suggesting issues to consider in a much-needed re-examination of how to 'constructively engage' the Burmese junta.

A History of Oil and Gas Exploitation

Burma is one of the poorest countries in Asia. It is also among the world's oldest oil-producing countries. Oil has been extracted manually at Yenangyaung on the Irrawaddy River since ancient times, and the first exports of crude oil were shipped to Britain as early as 1853. [3] The first foreign oil company to operate in Burma was the Rangoon Oil Company, set up in 1871 by a group of Scottish entrepreneurs. Oil, timber and gems were the natural resources that drew British interests to Burma, which was annexed as a province of British India in 1886. The extraction of oil was subsequently monopolized by the British through the Burmah Oil Company, which was set up in continuation of the Rangoon Oil Company in 1886 and dominated the Burmese oil industry until 1962. Immediately after Burma's annexation, the Burmah Oil Company took over the Yenangyaung oil field from its indigenous owners. In 1897, another major oil field was discovered at Singu in the Irrawaddy basin: the Chauk-Lanywa field. By 1906, Burmah Oil delivered nearly half of all kerosene supplies to India and was a contracted provider of fuel oil to the British Navy. Oil refineries were built at Syriam, a river port opposite Yangon (Rangoon). Later, crude oil from Chauk was sent by a 563 km pipeline to Syriam for refining. A profitable oil industry was established, with production reaching 6.56 million barrels in 1939 and oil exports amounting to US\$35 million in 1940. [4]

Oil production declined from 1942, when Japan occupied the country and destroyed the Syriam refinery. Insurgent sabotage of the pipeline during the independence struggle after World War II confined marketing of Chauk's oil to northern Burma. Oil tankers began operation on the Irrawaddy River as an alternative means of transport to the damaged pipeline. A refinery at Chauk was renovated in 1954, and the pipeline was repaired between Chauk, Tagaing and Yenenma, and between Prome and Syriam. The Syriam refinery was restored in 1957 and underwent expansion in

1979 with Japanese assistance. A pipeline connecting the Mann oilfield and Syriam was also completed in 1979, and the Syriam refinery now has a tanker terminal, while Mann has its own refinery. [5]

Burma's independence from Great Britain in 1948, after 62 years of colonization, was followed by recurrent political unrest, armed insurrections and civil strife, particularly among the Mon, Rohingya and Karen minorities. The Chinese civil war also spilled over into northern Burma. According to some estimates, the death toll from armed conflict may have reached 60,000 in the first two years after independence. [6] During the first years of civil war, oil production was badly hit. The oil fields at Yenangaung, which were for a long time the country's most productive, were seized by rebels (Communist Party of Burma and People's Volunteer Organisation) and not recaptured by government troops until 1953. [7] The Burmese government always regarded the country's oil and gas reserves as an important economic asset, and even the opposition used promises of oil concessions to fund their activities. According to one account, the prominent opposition leader U Nu, who served as prime minister in 1948-58 and 1960-62, received US\$1 million after reportedly making a deal with the Canadian Asmara Oil Company in the late 1960s. [8]

After 1962, when Socialist military rule was established under Ne Win, the oil industry was nationalized. The Myanma Oil and Gas Enterprise (MOGE) was set up in 1963, under the Ministry of Energy. The ministry later established the Myanma Petrochemical Enterprise, which operated refineries and processing plants, and the Myanma Petroleum Products Enterprise, which handled the distribution of petroleum products. In the early 1980s, the first offshore joint venture was set up with a Japanese investment company to explore and develop offshore gas in the Gulf of Martaban. In 1985, another agreement was signed with Petro-Canada International Assistance Corporation to do a feasibility study for offshore gas development in the Gulf. When Ne Win finally stepped down in the summer of 1988, what became known as the Burmese democracy movement organized numerous mass rallies and strikes all over the country. The Syriam oil refinery was brought to a standstill. [9] The movement was defeated after a military coup and the imposition of martial law by the State Law and Order Restoration Council (SLORC). [10] A year later, in 1989, the Syriam refinery was targeted by a bomb attack, leading to the arrest and execution of three suspects after summary trials. Until the 1990s, timber and oil were key export products for Burma. During the 1960s and 1970s, oil production remained modest, but increased from 3.81 million barrels in 1965, to 6.3 million barrels in 1971, to 9.55 million barrels in 1978. [11] In the early 1980s, however, production declined, owing to technical limitations and government reluctance to accept the participation of foreign firms. Before SLORC took power in September 1988, all Burmese governments had prohibited foreign participation in onshore oil exploration and production. In 1988 SLORC opened up the opportunity for foreign companies to explore for oil and gas. After the promulgation of the Foreign Investment Law in November 1988, [12] MOGE entered into production-sharing contracts (PSCs) with several multinational oil companies on petroleum exploration and production in both onshore and offshore areas. Ten companies, from the USA (Amoco), Canada (Petro-Canada), Britain (Royal, Premier), France (Total), the Netherlands (Dutch Shell), Japan (Idemitsu), Australia (Broken Hill) and Korea (Yukong) received concessions. [13] Substantial payments were made to SLORC on the signing of contracts. However, the results of onshore oil exploration were disappointing, and by 1997 only five companies remained active in the country. Throughout this period, oil production was in decline. In the fiscal year 1989/90 annual production was as low as 5.5 million barrels, in 1994/95 the figure was 4.28 million barrels, and in 1996/97 only 3.8 million barrels. [14]

Natural gas production started in 1974 at the Aphyauk gas field near Taikkyi Township in the lower delta of the Irrawaddy River. Gas produced by the wells at this field was piped to Yangon for power generation at Thaketa and at Shwedaung near Prome, as well as for industrial use at the Sittaung paper mill in Yangon. In 1975, gas production reached 4,575 million cubic feet, rising to some

40,000 million cubic feet in 1990, dropping to 31,782 million cubic feet in 1991/92, and rising again to 58,575 million cubic feet in 1996/97. [15] Starting in 1990, the first foreign companies to buy offshore natural gas concessions were Premier Oil (UK) and Total (France). In the early 1990s, SLORC invited foreign bids for offshore exploration in 18 concession blocks, 13 in the Gulf of Martaban and five off the coast of Arakan state. Oil companies such as Texaco, Premier Oil, Total and Unocal were among the successful bidders. Two major offshore gas fields, Yadana and Yetagun, were discovered in the Gulf of Martaban. The Yadana field has estimated gas reserves of more than 5.3 trillion cubic feet, or 150 billion cubic metres, with an expected field life of 30 years. The Yetagun field has estimated reserves of 48 billion cubic metres. Production from the Yadana field started in 1998, and production from Yetagun started in 2000. The discovery of a new gas field off the coast of Arakan was announced in 2004. The Shwe gas field, as it was named, has been divided into several blocks, of which the A-1 and A-3 blocks are currently under development.

The Political Context

The National League for Democracy (NLD) grew out of the 1988 democracy movement and has been led since that time by Aung San Suu Kyi. Soon after SLORC rule was established, Suu Kyi was detained and put under house arrest. In 1990, general elections were held. The NLD gained a clear majority of the votes, but SLORC refused to give up its dictatorial rule. Suu Kyi was held under house arrest until 1995, and has been closely watched and under house arrest intermittently in the last eleven years as well.

Although SLORC invited foreign investment and a number of Western companies took up their offer, many have since withdrawn from Burma - for varying reasons. Following longstanding protests against investment in Burma, the European Union introduced its first Common Position on sanctions against Burma in 1996, and US President Bill Clinton enforced a prohibition on future investments in Burma in 1997. This was on the advice of the Burmese democracy movement, including Burmese exile activist groups, Aung San Suu Kyi and the NLD. The EU Common Position has been gradually expanded. It currently prohibits investment in Burmese state-owned enterprises, precludes travel to the EU by officials of the SPDC and their families, and freezes their bank accounts. Multinational companies operating in Burma have also been under heavy pressure from NGOs, especially in Europe and the United States, who have carried out numerous public campaigns, including protests outside shareholder meetings and the publication of blacklists of companies with a presence in Burma. [16] The Yadana pipeline and Yetagun gas development projects have been particularly controversial. Since the 1990s, NGOs have also provided legal assistance to Burmese nationals affected by the construction of the Yadana pipeline, and have taken their cases to court in the USA and Europe. In 1996, EarthRights International filed a lawsuit in US courts on behalf of 15 Burmese villagers, against California-based Unocal for human rights abuses associated with the construction of the Yadana pipeline. [17] In 1997, the US Federal District Court in Los Angeles found that 'the evidence does suggest that Unocal knew that forced labor was being utilized and that the Joint Venturers benefited from the practice'. On the basis of this finding, the Court concluded that corporations and their executive officers can be held legally responsible under the Alien Tort Claims Act for violating international human rights in foreign countries, and that US courts have the authority to adjudicate such claims. [18] In Europe, lawsuits were filed against Total, first in Belgium on the basis of the Universal Jurisdiction Law, citing 'complicity in crimes against humanity', and later in France, citing 'complicity in unlawful confinement'. [19]

Both the case in France against Total and the case in the USA against Unocal were settled out of court, and none of the companies ceased operating in Burma. However, the mounting pressure did lead other oil companies to withdraw. In the mid-1990s, Texaco and Premier Oil were joint partners in the Yetagun project, but in 1997 Texaco withdrew from the venture and Premier Oil increased its

stake from 20 to 27%. In 2002, Premier Oil also had to pull out of the Yetagun project, following sharp criticism of its involvement and calls for it to withdraw from both the British government and US investors. Premier's share in the Yetagun consortium was bought by the Malaysian oil company Petronas. In 2000, Aung San Suu Kyi was again detained, but in May 2002 she was released from house arrest after UN-led confidence-building negotiations. Following this, Japan and Australia agreed to provide financial support for targeted development programmes and dispatched their foreign ministers to Burma for the first time in almost two decades. Tokyo also began releasing part of a US\$28 million aid package for a hydroelectric dam. [20] However, this situation did not last long. In May 2003, Suu Kyi was rearrested, together with a large number of NLD followers. The Association of Southeast Asian Nations (ASEAN), of which Burma became a member in 1997, broke its traditional principle of non-interference in the domestic affairs of its members and called for the release of Suu Kyi and other political prisoners in Burma. Japan, Burma's top donor, stopped all new humanitarian and development aid, and the EU extended and intensified sanctions for another year. [21] The United States authorized new sanctions under the Burma Freedom and Democracy Act of 2003 and the accompanying 'Presidential Executive Order', extending a visa blacklist to all of Burma's military leaders, freezing their overseas assets, and banning all imports from Burma. [22] US financial institutions were also directed to take special measures against Burma to deny access to the US financial system through correspondent accounts. [23]

In August 2003, General Than Shwe resigned as prime minister while continuing as chairman of the SPDC, and General Khin Nyunt, former chief of military intelligence, became the new prime minister. In October 2004, new fissures appeared within the SPDC. After just over a year in office, Khin Nyunt was arrested on corruption charges (receiving a 44-year suspended sentence in 2005) and replaced by Lieutenant General Soe Win. Khin Nyunt had promoted UN-brokered talks between the government and the NLD and was considered to represent a relatively outward-oriented and conciliatory faction in the regime. However, the talks reached a stalemate when the government excluded the political parties from the constitutional drafting process and kept Suu Kyi under detention. [24] In the autumn of 2003, the government introduced a 'Road Map to Democracy', which has likewise failed to meet expectations. When the National Convention finally resumed constitutional talks in February-March 2005, a number of ethnic and political groups, including the NLD, were left out. In an unexpected turn of events, the regime also announced its decision to move the capital to Pyinmana. Moreover, the SPDC refused entry for both the UN special envoy for political reform and the UN human rights envoy. [25]

Although the withdrawal of Western oil companies operating in Burma has certainly had consequences for the projects in question, the impact of such withdrawals on the Burmese economy has been negligible, since countries such as Thailand, China, India and Russia are expanding their economic ties with Burma. The Burmese regime depends on revenues from foreign investment, primarily in oil and gas production. Access to Burma's gas resources is highly attractive for Thailand, India and China, as well as Malaysia, South Korea and Japan.

China and several ASEAN countries also see Burma as an important potential source of hydroelectric power. Hydropower development is set to become an important new income source for Burma, and another industry in which Burma has vital interests in common with its neighbours, particularly Thailand. In 2005, Burma signed an agreement with Thailand to build four new dams on the Salween River and one on the Tenasserim River. At the same time, the SPDC also signed contracts with two Chinese companies, CITIC Technology Co Ltd and Sino Hydro Corp Ltd, to build a new hydroelectric facility, the 790-megawatt Yeywa hydropower plant on the Dukhtawaddy River near Mandalay. [26]

Japan provided funds for Burma's first large-scale hydroelectric project, the Lawpita hydropower

plant and Moby dam on the Balu Chaung River, built in the 1960s as part of Japan's war reparations package after World War II. According to the Karenni movement, the construction led to the displacement of more than 12,000 local villagers (mainly Shan and Karenni), due to forced relocation and land loss. [27] A Japanese company, Nippon Koei, was also involved in the initial planning, starting in 1981, of the Tasang Dam on the Salween River. At 228 metres, the Tasang Dam is slated to become the highest dam in Southeast Asia. The Chinese hydroelectric construction company Sino Hydro Corp Ltd is one of the interested parties in the hydropower projects developed by the Electricity Generating Authority of Thailand (EGAT), including the Tasang Dam and four other dams in Burma. The Asian Development Bank is promoting a US\$4.6 billion regional electricity scheme, which is to be powered in part by the Tasang Dam. [28] According to current plans, 12 hydropower projects in China, Burma and Laos will fuel the 'Mekong Power Grid' and generate power for consumers in Thailand and Vietnam. These include the Tasang in Burma, the Jinghong and Nuozhadu projects in China, and the Nam Theun 2 in Laos. In addition to the need for foreign revenue from hydropower and gas development, Burma's foreign relations are driven by the SPDC's need for military assistance. Since the early 1990s, China has been the major provider of weapons, military aircraft, naval ships and other military hardware. China withdrew, however, from a project to develop a Burmese nuclear research reactor. In 2002, Russia instead signed an agreement to assist Burma in building this reactor. It has since been constructed on an island off the Burmese coast. There is also reliable evidence that Pakistan has been assisting the Burmese nuclear research programme. Two Pakistani scientists who were involved in Pakistan's nuclear arms programme have been working in Burma for several years. Their presence in Burma was revealed when they appeared on a list of suspected 'terrorist connections' presented to Pakistani authorities by the CIA in late 2001. [29] Burma recently granted the two scientists asylum. [30]

In April 2006, a top-level Burmese 'goodwill' delegation to Moscow reportedly sought Russian investment in hydropower and communications projects. [31] The Russian foreign ministry announced that the two sides discussed the importance of a regular dialogue on international and regional problems and expressed interest in cultivating cooperation in fighting terrorism and drug-trafficking. In exchange for access to Burmese oil and gas resources, Russia also agreed to supply a range of arms, including Tor-M1 and Buk-M1-2 air-defence systems, as well as MiG-29 fighters. [32] Russia further offered to build factories for repairing and upgrading arms bought from the former Soviet Union. According to some analysts, this was done 'in a bid to end Chinese monopoly'. [33] However, an alternative interpretation is that these factories would accommodate Chinese as well as Russian interests, since the hardware in question is also used by the Chinese military. In support of this view, Russian assistance to Burma was described by one commentator as 'a contribution to regional security following President Vladimir Putin's recent visit to China'. [34] From the SPDC's perspective one of the key advantages of cooperating with Russia is to reduce the country's dependence on China. Another factor is the Russian assistance to Burma's nuclear research programme. ASEAN, Australia and India are all seeking to 'constructively engage' the Burmese regime, and this, as well as China's close cooperation with the SPDC, is regarded by critics as undermining sanctions imposed by the USA and the EU. However, others take a more pragmatic view, also taking into consideration factors such as the implications of the Western-imposed sanctions on Burma's economic and geopolitical ties, as described above. For instance, within the EU negotiations on the Common Position, France has objected to the current use of sanctions and called for more lenient sanctions or the replacement of sanctions with active engagement. In 2005, China and Russia also challenged US Burma policies, using the threat of a veto to block a US move in the UN Security Council to implement recommendations on Burma. After the USA and the EU had threatened to boycott ASEAN meetings if Burma assumed the chair in 2006, Burma's rulers agreed to relinquish the country's turn to hold the rotating ASEAN chairmanship. During a recent meeting of the ASEAN Regional Forum (ARF), however, Chinese Foreign Minister Li Zhaoxing chose to skip the security point on the agenda, and travelled to Burma instead to express solidarity with the

regime. [35] These are just a few examples of the continuous diplomatic manoeuvring over Burma, with China, Thailand and other ASEAN countries, the United States, India, the EU, Australia and Russia playing the key roles.

Actors and Interests in Burmese Natural Gas

In 2004, Burma exported natural gas (through the Yadana pipeline) to Thailand for nearly US\$1 billion, which is claimed to be at least twice as much as Burma could have earned from trade with the USA and the EU if they had not applied sanctions. [36] The oil and gas sector continued to grow in 2005, owing to Chinese, Thai, South Korean and Indian investments. Thailand's imports from Burma, mainly consisting of gas from Yadana and Yetagun, rose by more than 50% that year. [37] Gas is now by far the most important source of income for Burma, and one-third of foreign direct investment (FDI) in Burma is in the oil and gas sector. The combined FDI in Burmese oil and gas since 1988 is approximately US\$2.5 billion, 33% of all of Burma's FDI. [38] From the newly discovered Shwe field alone, the Korean Daewoo International has predicted at least US\$86 million in net profit annually for 20 years from 2010, while Burma is projected to earn a minimum of US\$800 million a year, and potentially up to US\$3 billion. [39] The Yadana project was developed by a consortium consisting of Total (31%), Unocal (28%), PTT-EP of Thailand (26%) and Burma's own MOGE (15%). It is operated by Total. Gas from Yadana is transported via a 346 km subsea pipeline and a 63 km onshore pipeline from the Yadana field to the border between Burma and Thailand at Ban I Thong. At the border, the Yadana pipeline connects with a pipeline built by Thailand, which carries the gas to its destination area near Bangkok, providing fuel to the Rathcaburi and Wang Noi power plants. Gas from the Yadana field covers an estimated 15-20% of Thailand's demand for natural gas. [40]

The Yetagun gas field was developed by a joint venture of Texaco (50%), the British oil company Premier Oil (30%) and Nippon Oil (20%). Following Texaco's withdrawal in 1997 and Premier Oil's in 2002, Yetagun is operated by Petronas in partnership with MOGE (20%), Nippon Oil (19%) and PTT-EP (19%). The gas is transported by 210 km of subsea pipeline and 67 km of onshore pipeline, linking up onshore to the Yadana pipeline. The Yadana pipeline was constructed and is operated by the Moattama Gas Transportation Company, which has been set up by the shareholders in the Yadana gas field project. In August 2000, the South Korean Daewoo International partnered with MOGE to explore and potentially develop offshore natural gas deposits in the Bay of Bengal off the coast of Arakan. Exploration commenced, and in 2004 Daewoo International announced the discovery of the Shwe field, off the coast of Sittwe, the capital of Arakan state. There are preliminary plans to explore for gas in several blocks in the Bay of Bengal, but so far test drilling has only been made in Shwe's blocks A-1 and A-3. The A-1 block is the largest, estimated to contain between 2.88 trillion and 3.56 trillion cubic feet of natural gas. Partners in the project's international consortium are Daewoo (60%), the state-owned Korean Gas Corporation (10%), and India's ONGC (20%) and GAIL (10%). Production from the Shwe field is planned to start in 2009. Natural gas from Shwe has become a contentious issue in relations between India and China, and an obstacle to Sino-Indian energy cooperation. For more than two years, it was presumed that gas from the A-1 Block would serve uniquely the Indian market via an overland pipeline running through Burma's Arakan and Chin states, across Bangladesh to Kolkata. [41] However, using India's growing demand for natural gas as a leverage point, Dhaka set forth a number of conditions for allowing any pipeline to cross Bangladeshi territory: establishing trade routes for commodities from Bangladesh to Nepal and Bhutan through Indian territory; allowing transmission of hydro-electricity from Nepal and Bhutan to Bangladesh through Indian territory; and pursuing measures to reduce Bangladesh's trade imbalance with India. [42] The project reached a diplomatic stalemate when India rejected these conditions. In December 2005, while India and Bangladesh deliberated to a standstill, Burma seized the opportunity to sign a Memorandum of Understanding with PetroChina for the sale of gas from

the A-1 Block to China through an overland pipeline through Burma to Kunming, the capital of China's Yunnan province. [43]

The introduction of China into the Shwe gas picture was to be expected for several reasons. According to Burmese scholar Dr. Kyaw Yin Hlaing, the Memorandum of Understanding with PetroChina should be seen in light of the ever-growing trade relationship between Burma and China. When PetroChina indicated that it was ready to buy, the Burmese regime had no incentive to set aside the gas exclusively for India and patiently await the outcome of stalled bilateral negotiations with Bangladesh. [44] With another buyer at hand, there is also added pressure on the Indians to find solutions to their problems, including alternative pipeline routes bypassing Bangladesh. Burma already gains substantial hard currency from the sale of natural gas through pipeline to Thailand, and the Burmese rulers are of course aware of the advantages they can reap from negotiating prices when selling gas from the same field to more than one country at a time. Following publicity on the PetroChina agreement, Burma assured the Indian petroleum ministry that it had sufficient gas reserves to meet the needs of both China and India, although India would have to wait until May 2006 for third-party consultants to confirm reserves before export deals were finalized. Burma was waiting for assessments of several deposits, including the Mya1 well in the A-3 block. The Burmese promise seems to have satisfied the Indian government. In early 2006, Brussels-based consulting firm Suz Tractebel was hired to conduct a feasibility study for overland pipeline routes to Northeast India, circumventing Bangladeshi territory. [45]

It should be in the interest of Burma to diversify its foreign relations, but the military regime has done so only to a limited extent, favouring its relations with China. Burma has of course strengthened its economic ties with other neighbours, including Laos, Thailand and India, and with allies such as Vietnam and Russia. However, when Burma recently agreed to Chinese pipeline projects both for oil and gas, this drew Burma even deeper into the Chinese sphere of interest. On the other hand, if the current plans are realized, gas pipelines from Burma will extend into two new and significant markets for Burmese natural gas, India and China. Burma may then play its three gas customers against each other when negotiating for the best possible prices.

Sino-Indian Interests and Rivalry in Burma

Burma exemplifies the difficult balance between competition and cooperation between China and India over oil and gas resources in third countries. India and China's proximity to Burma provides an opportunity for both countries to enhance their energy security by diversifying fuel-supply sources while avoiding the need for expensive LNG (liquid natural gas) transportation. For China, Burma also represents a possible overland supply route for oil and other commodities bypassing the Malacca Strait, a sealane that is vulnerable in the event of an attack or embargo. Access to Burmese ports and overland transportation routes through Burma is seen as a vital security asset for China. [46] This has become increasingly important with the growing Chinese dependence on imported oil, 80% of which is shipped into China via the Malacca Strait. A key Chinese objective is thus to import oil through Burma. According to a recent report, plans for an oil pipeline linking Burma's deep-water port of Sittwe with Kunming in China's Yunnan province were approved by the National Development and Reform Commission (a department of the Chinese State Council) in early April 2006, with construction expected to begin this year. [47]

Assistance from the People's Republic of China to Burma dates back to the 1950s. A significant part of China's trade with developing countries has been financed through credits, grants and other forms of assistance. During the early 1950s, Chinese aid went mainly to North Korea and North Vietnam; however, from the mid-1950s until the late 1970s, large amounts - mainly grants and long-term, interest-free loans - were promised also to non-Communist developing countries. The principal efforts were made in Asia, and Burma was one of the recipients of this support, along with

Indonesia, Pakistan and Sri Lanka. [48] In 1986 China withdrew its support for the long-running insurgency of the Communist Party of Burma, [49] and began supplying the Burmese regime with arms. The influx of Chinese weapons was a great help to the Burmese military in its fight against ethnic insurgencies. Chinese arms deliveries started in 1990, and over the next five years China supplied US\$1.0-1.2 billion worth of weapons and other military equipment, including J-6 and J-7 fighters, A-5M ground attack aircraft, radar and radio equipment, surface-to-air missiles, tanks, armoured personnel carriers, artillery anti-aircraft guns, multiple rocket-launcher systems, trucks and naval ships, including frigates and fast attack craft (FAC). [50] Moreover, technicians from the Chinese People's Liberation Army (PLA) vastly expanded the Meiktila airbase south of Mandalay, and upgraded a smaller airbase at Lashio, in the northeast, as a forward facility for aircraft refueling and resupply. Chinese assistance was also provided to upgrade the road and railway system from Yunnan to several ports along the Burmese coast of the Bay of Bengal. In 1992, China and Burma agreed that China would modernize Burmese naval facilities, in return for permitting the Chinese navy to use the Small and Great Coco Island (about 300 km south of the Burmese mainland, north of India's Andaman Islands). Since then, Chinese experts have built an electronic intelligence station on Great Coco Island, vastly improved and militarized the Burmese port facilities in the Bay of Bengal at Akyab (Sittwe), Kyaukpyu and Mergui, and constructed a major naval base on Hainggyi Island near the Irrawaddy river delta. The Chinese base on Great Coco Island includes an airstrip, signal-intelligence nodes and an 85-metre jetty. [51] The base monitors Indian naval and missile launch facilities in the Andaman and Nicobar Islands, movements of the Indian navy and other navies throughout the eastern Indian Ocean, as well the overall western approaches to the Strait of Malacca. [52]

China is currently building a deep-sea port in Kyaukpyu, in Rakhine state. The port has a water depth of 20 metres and is capable of accommodating 4,000 TEU (20-foot equivalent units) container vessels. Kyaukpyu is located on the route connecting southwestern China's Kunming city with Burma's Sittwe. According to the Burmese Ministry of Construction, a feasibility study for the seaport and road construction, outlined as Kunming-Mandalay-Kyaukpyu-Sittwe, was made in 2005. Once the 1,943 km Kunming-Kyaukpyu road is completed, it is expected to facilitate transit trade and provide job opportunities for Burmese workers and others in the region. [53]

One of China's strategic interests in Burma is to gain direct access by land to the Southeast Asian nations and, more notably, access to the Andaman Sea. Burma is not only a potential supply route bypassing the Malacca Strait, but can also offer a strategic staging point for monitoring the Malacca Strait's western approaches. Yossef Bodansky claims that 'controlling' the Strait of Malacca is a key strategic objective for China, to the point that it is prepared to risk armed conflict with the regional states and even the USA over this issue. [54] Bodansky maintains that the massive Chinese military buildup in Burma since the early 1990s reflects Burma's growing strategic significance, stressing that 'the extent of the expansion of the transportation infrastructure, all in harsh jungle and mountainous terrain, exceeds by far the needs of even the most optimistic outlook for Sino-Burmese commercial relations'. [55] In the mid-1990s, the Burmese regime granted access for Chinese intelligence services to Zedetkyi Kyun Island, located off the coast of Burma's southernmost tip, Kawthaung or Victoria Point, which is close to the northern entrance to the Strait of Malacca. Bodansky claims that a military base there would enable China to threaten the approaches to the strait. China has currently set up listening posts in Sittwe and Zedetkyi Kyun, enabling it to monitor traffic in the Strait of Malacca and Phillips Channel. [56]

As a result of increased Chinese influence in Burma, as well as arms-trafficking occurring along the Indo-Burmese border, India has sought in recent years to strengthen its ties with Burma. [57] India's interest in and involvement with Southeast Asia has been growing steadily over the past decade. In 2004, an agreement was signed in Yangon by the foreign ministers of India, Burma and Thailand to

develop transport linkages between the three countries. This included a 1,400 km highway connecting northeastern India with Mandalay and Yangon, and on to Bangkok, which would contribute to opening up trade between the countries and give India access to Burmese ports. A planned deep-sea port in Dawei, together with a new highway connecting it to Kanchanaburi in Thailand, would no doubt contribute further to commercial links. Dawei, the capital of Tanintharyi division, is on the long, narrow coastal plain of southern Burma.

Building Dawei port also has a direct security angle for the Indian navy, which is now in the process of sorting out the technical and financial details of its ambitious Far Eastern Naval Command (FENC) project at Port Blair, the capital of the Andaman Islands. FENC is intended to extend the Indian navy's nuclear/strategic combat capability. Dawei is located across the Andaman Sea on the Burmese coast, almost facing FENC. [58] Indian analysts worry that the Chinese base on Great Coco Island poses a threat to the Indian tri-services command in Port Blair, which is only about 190 nautical miles (300 km) away. The Coco Island base lies only 22 nautical miles from Landfall Island, the northernmost of the Andamans. The Coco Island facility is also seen as a significant ELINT (electronic intelligence) and SIGINT (signal intelligence) threat to India's missile-testing range, Chandipur-on-Sea and the Sriharikota Island Launching Range, which are designed to assemble, test and launch Indian multi-stage rockets. According to Indian security analysts, the Chinese presence on Coco Island should be seen in connection with the Sino-Pakistani defence project and cooperation on the Gwadar Port facilities, which give China access and basing facilities on the other side of the Indian subcontinent, near the Strait of Hormuz. What is especially worrisome from the Indian perspective is the 'maritime encirclement of India', with the Chinese based at Gwadar to the west of India and on Coco Island to the east. In addition, Burma's experiments with a nuclear research reactor are worrisome from an Indian perspective, especially since China, Pakistan and Russia have all been involved. Indian analysts fear that China's naval presence in Burma may allow it to interdict regional sea lanes of communication. On this account, Burma is emerging as the 'single largest threat to Indian strategic interests in South East Asia'. [59] In an effort to check this state of affairs, India has started its own campaign to woo the Burmese regime by providing military training and selling it arms and military hardware. [60] In addition, Indian President Abdul Kalam recently visited Burma with a new \$40 million aid package, along with a proposed natural gas agreement. [61]

Even though India and China seem to regard each other with considerable suspicion, the two countries, which have considerably improved their own bilateral relations, are also faced with some common 'non-traditional' security risks emanating from Burma, including illegal drugs-trafficking (opium and methamphetamines), human trafficking and refugees, the spread of HIV/AIDS and, more recently, avian influenza. Burma has become known as the world's second-largest producer of illicit opium, after Afghanistan. It is also the single largest producer of methamphetamines in Southeast Asia. The government lacks both the will and the ability to take on the major narcotics-trafficking groups, and is not seriously committed to suppressing the money-laundering activities that are so essential to the drugs trade. [62] Burma also has a lot of human trafficking; there is a steady flow of refugees into Thailand, China, Bangladesh and India; and the HIV virus is thought to be spreading. More than 1% of the Burmese population is estimated to have been infected with HIV. [63] Burma thus has one of the most serious AIDS epidemics in the region, and is reportedly also an epicenter of new strains of drug-resistant HIV/AIDS. [64] While the Chinese border town of Ruili has developed into a flourishing trading centre, it has also become a focus of Chinese efforts to prevent the spread of HIV from Burma to China.

The issues of drugs, HIV and crime are serious enough, but the debates they engender also reflect a more overarching concern among Burma's neighbours about the country's political stability. Although the regime has been provided with substantial income from Thai natural gas purchases

over the past few years, and is continuously receiving generous provisions of military and infrastructure aid from China, India and other countries, there are indications that the SPDC may be leading Burma into an ever-deepening crisis.

Policy Implications

Offshore natural gas has become the major source of income for the Burmese military regime, and will become increasingly important in the years to come. The effects of economic sanctions imposed by the EU and USA are difficult to assess, but they are certainly not impressive. With the growing importance of natural gas, any assessment of the economic effects of sanctions should take the role of gas into account. If the regime could be deprived of substantial revenues from gas exports, economic sanctions would represent a real challenge to the regime, and this might convince the SPDC to accept political reforms. If not, the effectiveness of sanctions is highly questionable. Innovative ways to engage the regime might prove more feasible, especially if this engagement involves stakeholders in Burmese gas exploitation. Thailand's heavy investment in the Burmese gas sector as well as the escalating Sino-Indian rivalry over Burmese gas have no doubt made it easier for Burma's military leaders to withstand pressure for political reforms. From China's perspective, its relations with India, Japan and the USA have a strong bearing on its geopolitical interests in Burma. As long as the underlying tensions that characterize these relations (in particular the Sino-Japanese relationship) are not fundamentally altered, China will see it as essential to maintain its influence in Burma. Chances are then that future unrest in Burma, whether related to internal strife or opposition to Chinese dominance, will be met with further assertion of Chinese control. This represents a major challenge to any democracy-building effort in Burma. Given that Burma is likely to remain under strong Chinese influence for the foreseeable future, the most promising scenario for Burma's political development would probably come about as a result of positive developments within China itself. A stable, prosperous, democratizing China might be able to engage constructively with the Burmese regime, and this might also provide the best chance of resolving the current crisis in Burma. China may well hold the key to Burma's future. While countries in the neighbouring regions - particularly India and Thailand, but also Australia and Japan - may have important roles to play, China wields far more leverage. For those who wish to influence Burma in a positive direction, it is therefore essential to consider ways that change could be stimulated with the active participation of China, whether through sanctions, constructive engagement and/or any form of dialogue. Ideally, such cooperation should involve the energy sector, including gas production and pipeline construction.

III. Citations

[1] In line with the practice of all supporters of Burmese democracy, the name 'Burma' is used consistently in this report, although the official English-language name of the country under its present regime is 'Myanmar'.

[2] Testimony by Dr Michael Jonathan Green, Center for Strategic and International Studies, addressing the US Senate Foreign Relations Committee, Subcommittee on Asia Pacific Affairs, on 'The Strategic Implications of the Burma Problem'.

[3] For a detailed account of the history of Burmese oil extraction until 1914, see Marilyn V. Longmuir, 2001, *Oil in Burma: The Extraction of 'Earth-Oil' to 1914*, Bangkok: White Lotus Press.

[4] David I. Steinberg, 2001, *Burma: The State of Myanmar*, Washington, DC: Georgetown University Press, pp. 22, 134.

[5] Encyclopædia Britannica online: 'Syriam', 'Chauk'.

[6] Martin Smith, 1999, *Burma: Insurgency and the Politics of Ethnicity*, London: Zed Books, p. 119.

[7] *Ibid.*, p. 120.

[8] *Ibid.*, p. 277. Some sources claim the CIA was behind the deal.

[9] Ibid., p. 8.

[10] The State Law and Order Restoration Council (SLORC) was renamed the State Peace and Development Council (SPDC) in November 1997, when its first chairman General Saw Maung died and was succeeded by General Than Shwe.

[11] David I. Steinberg, 2001, *Burma: The State of Myanmar*, Washington, DC: Georgetown University Press, pp. 133-134.

[12] The Myanmar Foreign Investment Law is available at the official government website. http://www.energy.gov.mm/Incentive_1.htm

[13] A total of 46 onshore blocks and 25 offshore blocks had been apportioned as of 2000.

[14] David I. Steinberg, 2001, *Burma: The State of Myanmar*, Washington, DC: Georgetown University Press, pp. 22-23, 148.

[15] Ibid., p. 148.

[16] For NGO views on human rights abuses associated with gas projects in Burma, see the EarthRights International report 'Total Denial Continues' (2003) and the online article 'Another Yadana'; on foreign investment, see 'Destructive Engagement: A Decade of Foreign Investment in Burma' (1999), on sanctions, see 'The European Union and Burma: The Case for Targeted Sanctions' (2004). <http://www.earthrights.org/files/Reports/destructive.pdf>
http://www.burmacampaign.org.uk/reports/targeted_sanctions.htm

[17] The 9th Circuit Court's decision ('Doe v Unocal').

<http://www.laborrights.org/projects/corporate/unocal/unocal091802.pdf>

[18] EarthRights International, 'Shwe Gas Project in Burma: Recent Developments', 8 March 2006. <http://www.earthrights.org/content/view/289/41/1/1/>

[19] Total, 2005, 'Total in Myanmar: A Sustained Commitment', p. 33.

[20] Encyclopædia Britannica online: 'Myanmar, Year in Review 2003'.

[21] Ibid.: 'Year in Review 2004'.

[22] The Burma Freedom and Democracy Act of 2003.

http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_bills&docid=f:h2330enr.txt.pdf

[23] Faced with a ban on remittances to Burma in US dollars, the Myanmar Foreign Trade Bank had to replace dollar accounts with accounts in euros. The Bank of China recently followed up with a decision to close the dollar accounts of Burmese merchants engaged in border trade and replace them with euro accounts.

[24] The regime promised her release in December 2005; see Maila Ager, 'Myanmar Agrees To Release Aung San Suu Kyi: Source', 13 December 2005

<http://www.commondreams.org/cgi-bin/print.cgi?file=/headlines05/1213-08.htm>

[25] Encyclopædia Britannica online: 'Myanmar, Year in Review 2005'.

[26] 'Burma Junta To Buy Hydropower Equipment from China', *Democratic Voice of Burma*, 17 July 2005.

[27] Karenni Development Research Group, 2006, 'Dammed by Burma's Generals: The Karenni Experience with Hydropower Development from Lawpita to the Salween'.

<http://www.salweenwatch.org/downloads/Dammed.pdf>

[28] Karen Rivers Watch, 2004, 'Damming at Gunpoint: Burma Army Atrocities Pave the Way for Salween Dams in Karen State'. The scheme is an initiative under the Asian Development Bank's Greater Mekong Subregion programme, intended to encourage cooperation and economic growth in the six countries sharing the Mekong River basin. The programme is based in part on recommendations from Norwegian Norconsult, presented in a 1994 report to the ADB on 'Promoting Sub-Regional Cooperation Among Cambodia, Laos PDR, Thailand, Vietnam and Yunnan Province of the People's Republic of China', funded by the Japan Special Fund.

[29] K. J. M. Varma, 'CIA Wants Six More Pak Nuke Scientists Probed', 6 December 2001. In January 2002, an article in the *Wall Street Journal* claimed that the two scientists were possibly aiding Burma's efforts to build a 10 megawatt nuclear 'research reactor'. The Pakistani government

reportedly asked the two scientists to stay in Burma, fearing that they might leak information regarding the Pakistani nuclear program if they were interrogated.

[30] 'Pakistan Scientists Granted Asylum', The Irrawaddy News, 12 April 2006.

[31] BBC News online, 'Burma's Deputy Leader in Russia', 3 April 2006.

<http://news.bbc.co.uk/2/hi/asia-pacific/4872158.stm>

[32] 'Russia To Supply Wide Range of Arms to Myanmar', Press Trust of India, 4 April 2006.

[33] Bureau Report, 'Russia, Myanmar Agree To Step Up Ties', 4 April 2006.

[34] 'Myanmar Seeks Russian arms for oil', AFP, 4 April 2006.

[35] Encyclopædia Britannica online: 'Myanmar, Year in Review 2006'.

[36] Encyclopædia Britannica online: 'Myanmar, Year in Review 2005'.

[37] Encyclopædia Britannica online: 'Myanmar, Year in Review 2006'.

[38] 'Foreign Investment in Burma Hits US \$7.6 Billion', Irrawaddy online newsletter, 18 November 2005.

[39] S. Mukherjee, 2004, ' Myanmar: Cheers Jeers Over Giant Gas Find', Asia Times online, 13 February 2004. http://www.atimes.com/atimes/South_Asia/FB14Df05.html

[40] Total, 2005, 'Total in Myanmar: A Sustained Commitment', p. 10.

[41] On Shwe gas development prior to the Memorandum of Understanding regarding the sale of Shwe gas to China, see Matthew Smith & Naing Htoo, 2005, 'Another Snake in the Jungle? Shwe Gas Development in Western Burma', Watershed, vol. 2, no.1, pp. 31, 34-3.

<http://www.terraper.org/watershed/index.html>

[42] ' Primary Jolt in Burma-India Gas Pipeline Project', Mizzima news, 19 January 2005

<http://mizzima.com/archives/news-in-2005/news-in-jan/19-January%2005-24.htm>

[43] David Fulbrook, ' Gas Deal Fuels China's Plans for Myanmar', The Straits Times, 2 February 2006 http://www.orientreport.com/article_details.asp?gid=Politics&aid=Articles_Vmoe

[44] Kyaw Yin Hlaing, 2005, 'Myanmar in 2004: Why Military Rule Continues', in Southeast Asian Affairs, Institute of South East Asia Studies Publications, pp. 231-256.

[45] Syed Ali Mujtaba, ' Consultant To Study Indo-Burma Gas Pipeline Routes', Mizzima News, 8 February 2006

<http://www.mizzima.com/mizzima/archives/news-in-2006/news-in-Feb/08-Feb-06-22.htm>

[46] See the perceptive map and interesting discussion from the Chinese perspective in John W. Garver 2006, 'China's Influence in Central and South Asia: Is It Increasing?', in David Shambaugh, ed., Power Shift: China and Asia's New Dynamics, Berkeley: University of California Press: 205-227.

[47] ' Energy: Sino-Burma oil pipeline', China Daily online, 18 April 2006.

http://www.chinadaily.com.cn/bizchina/2006-04/18/content_570622.htm The National Development and Reform Commission is macro-economic regulatory department, with a mandate to develop Chinese national economic strategies. Although not stated, publication of this news item indicates that Burmese authorities have already approved the pipeline.

[48] Encyclopædia Britannica online: 'China'.

[49] The Communist Party of Burma (CPB) was based in northeast Burma along the border with China. In 1989, the CPB leadership was overthrown by its own troops, many of whom regrouped as the United Wa State Army.

[50] Yossef Bodansky, ' Beijing's Surge for the Strait of Malacca'.

http://www.freeman.org/m_online/bodansky/beijing.htm

[51] Deepak V. Ganapathy, 2003, 'Hissing Dragon-Squirming Tiger: China's Successful Strategic Encirclement of India', South Asia Analysis Group paper no. 682.

[52] Yossef Bodansky, ' Beijing's Surge for the Strait of Malacca'.

http://www.freeman.org/m_online/bodansky/beijing.htm

[53] Ramtanu Maitra, 2005, ' The Energy Ties That Bind India, China', South Asia, 12 April 2005.

http://www.atimes.com/atimes/South_Asia/GD12Df03.html

[54] Yossef Bodansky, ' Beijing's Surge for the Strait of Malacca'.

http://www.freeman.org/m_online/bodansky/beijing.htm Bodansky was the Director of the US

Congress's Task Force on Terrorism and Unconventional Warfare.

[55] Ibid.

[56] Deepak V. Ganapathy, 2003, 'Hissing Dragon-Squirming Tiger: China's Successful Strategic Encirclement of India', South Asia Analysis Group paper no. 682.

[57] Retrieved from ' Foreign relations of Myanmar', Wikipedia, The Free Encyclopedia.
http://en.wikipedia.org/wiki/Foreign_relations_of_Myanmar

[58] Ramtanu Maitra, 2005, ' The Energy Ties That Bind India, China', South Asia, 12 April 2005.
http://www.atimes.com/atimes/South_Asia/GD12Df03.html

[59] Deepak V. Ganapathy, 2003, 'Hissing Dragon - Squirming Tiger: China's Successful Strategic Encirclement of India', South Asia Analysis Group paper no. 682.

[60] Testimony by Thin Thin Aung, Women's League of Burma, to the US-Burma Relations Hearing before the Committee on Foreign Relations of the United States Senate, 29 March 2006.

[61] Testimony by Dr Michael Jonathan Green, Center for Strategic and International Studies, addressing the US Senate Foreign Relations Committee, Subcommittee on Asia Pacific Affairs, on 'The Strategic Implications of the Burma Problem'.

[62] Retrieved from ' Foreign relations of Myanmar', Wikipedia, The Free Encyclopedia.
http://en.wikipedia.org/wiki/Foreign_relations_of_Myanmar

[63] Encyclopædia Britannica online: 'Myanmar, Year in Review 2006'. According to UNAIDS, the Burmese health department measured HIV prevalence among military recruits at 1.6% in 2004, while HIV prevalence among pregnant women was estimated at 1.8% in 2004.

[64] Testimony by Thin Thin Aung, Women's League of Burma, to the US-Burma Relations Hearing before the Committee on Foreign Relations of the United States Senate, 29 March 2006.

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nautilus@nautilus.org